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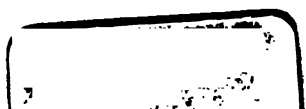
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STANFORD UNIVERSITY BULLETIN

SEVENTH SERIES, No. 74

DECEMBER 31, 1943

ANNUAL REPORT OF THE PRESIDENT
OF STANFORD UNIVERSITY

FOR THE FIFTY-SECOND ACADEMIC YEAR
ENDING AUGUST 31, 1943

THIS BEING THE FORTIETH REPORT SUBMITTED, TO WHICH
ARE APPENDED ANNUAL REPORTS OF THE FINANCIAL
VICE-PRESIDENT, DEPARTMENTS, COMMITTEES,
AND PUBLICATIONS OF THE FACULTY

STANFORD UNIVERSITY, CALIFORNIA
PUBLISHED BY THE UNIVERSITY
1943



TABLE OF CONTENTS

	PAGE
THE BOARD OF TRUSTEES	ix
OFFICERS OF THE BOARD	ix
STANDING COMMITTEES OF THE BOARD	ix
REPORT OF THE PRESIDENT (CHANCELLOR)	1
APPOINTMENT OF PRESIDENT TRESIDDER	1
BUDGET	1
MILITARY TRAINING UNITS	2
FRATERNITY HOUSES	5
EFFECTS OF THE WAR	6
RESEARCH	7
RADIO INSTITUTE	7
ACADEMIC CHANGES	7
CENTRAL RECORDS AND ADDRESSING BUREAU	8
ATHLETICS	8
STANFORD "CHAPARRAL"	9
RETIREMENT ANNUITIES FOR STAFF MEMBERS	10
FACULTY	10
Retirements	10
Absences	10
Resignations	11
Promotions	11
One- or Two-Quarter Appointments	12
New Appointments	13
Deaths	15
SUMMER QUARTER	22
STANFORD FUND	22
GIFTS TO THE UNIVERSITY	23
Special Gifts	23
General	30

APPENDIXES

	PAGE
I. REPORT OF THE FINANCIAL VICE-PRESIDENT	77
Balance Sheet	78
Income and Expense	79
Endowment Investments	81
Plant	82
Wills and Bequests	84
Other Activities	85
Personnel	87
Financial Statement	89
Auditors' Report	91
Financial Schedules	92
II. DEPARTMENTAL REPORTS	159
School of Biological Sciences	159
Anatomy	161
Bacteriology and Experimental Pathology	165
Biology	167
Hopkins Marine Station	172
Physiology	176
Natural History Museum	182
Graduate School of Business	190
School of Education	199
School of Engineering	207
Civil Engineering	210
Electrical Engineering	213
Mechanical Engineering	217
Military Science and Tactics	219
Mining Engineering	223
Food Research Institute	224
School of Health	228
Division of Hygiene	228

TABLE OF CONTENTS

v

	PAGE
Division of Physical Education for Men	229
Men's Health Service	231
Service for the Prevention and Care of Athletic Injuries	232
Public Health Service	232
Faculty Activities	233
School of Health (Women)	234
Women's Health Service	234
Physical Education	236
Physical Therapy	240
Nutrition and Dietetics	242
School of Humanities	243
Classics	248
English	249
Germanic Languages	253
Division of Graphic Art	257
Division of Music	259
Romanic Languages	265
Slavic Languages	268
Speech and Drama	269
School of Law	280
School of Medicine	283
Anatomy	288
Bacteriology and Experimental Pathology	288
Medicine	288
Obstetrics and Gynecology	289
Pathology	291
Pediatrics	292
Pharmacology and Therapeutics	293
Physiology	296
Public Health and Preventive Medicine	296
Surgery	299
Stanford University Hospitals	302

TABLE OF CONTENTS

	PAGE
Palo Alto Hospital	312
Stanford School of Nursing	312
School of Physical Sciences	314
Chemistry	314
Division of Electron Optics	320
Geology	321
Mathematics	324
Physics	326
School of Social Sciences	328
Economics	329
Division of Sociology	332
History	334
Division of Journalism	340
Philosophy	341
Political Science	342
Psychology	345
III. COMMITTEE REPORTS	353
Athletics	353
Board of Athletic Control	353
Independent Study Plan	356
Lower Division Administration	359
Public Exercises	359
Public Health	364
University Radio Committee	364
Research	365
Scholarship	367
University Publications	375
IV. ADMINISTRATIVE REPORTS	377
Stanford University Libraries	377
Hoover Library on War, Revolution, and Peace, and Hoover Research Institute	386

TABLE OF CONTENTS

vii

	PAGE
Office of Inter-American Relations	399
Dean of Men	409
Dean of Women	419
Memorial Church	423
Museums	426
Registrar	427
V. PUBLICATIONS OF THE FACULTY	467

REPORT OF THE CHANCELLOR

To the Honorable Board of Trustees:

Herewith is submitted my final report as President (Chancellor) of the University for the academic year 1942-43.

In turning my duties over to President Tresidder on September 1, I do so in full confidence in him and in the future of Stanford University.

At this time I want to express my appreciation and gratitude for the unfailing co-operation of the faculty and the loyal support of the Board of Trustees, which I have been accorded since assuming the presidency in 1916.

APPOINTMENT OF PRESIDENT TRESIDDER

On January 21, 1943, Dr. Donald Bertrand Tresidder submitted his resignations as Trustee and as president of the Board of Trustees, and upon their acceptance by the Board, he was forthwith unanimously elected President of Stanford University and the date of his taking office was set as of September 1, 1943.

In this connection it seems appropriate to present my statement at the time President Tresidder's appointment was announced:

There is an old story about those who sought treasure afar and were surprised upon their return to find what they were looking for in their own garden. A long search for a new President for Stanford University ends with the selection of one of our most beloved alumni, a Stanford man through and through. Dr. Donald Bertrand Tresidder has a fine mind, a fine spirit, and an appreciation of the true values of higher education. He believes in the privately endowed and privately supported university as of vital importance in our Republic.

Dr. Tresidder will go on where some of the rest of us leave off, with the confidence of all and with a sense of public responsibility that will make him an American leader as well as an exceptionally able administrator.

BUDGET

There have been many difficulties associated with budget operations for the academic year 1942-43 and in preparation for the year 1943-44.

With the granting of leaves of absence to a considerable portion of the faculty, and with the change in our teaching program due to the Army Specialized Training Program and the Civil Affairs

Training School, a number of new instructors had to be appointed. Constant adjustments were made without developing deficits. The bringing in of soldier students required the negotiation of difficult contracts.

Under the new procedure adopted for the budgeting of the University in the By-Laws of the Trustees it was necessary to make estimates on a less secure basis than usual. On April 15, 1943, the budget for the academic year 1943-44 was set at the same figure as for the year 1942-43, based on the following report by the president :

This budget is \$2,398,091.67 from General Funds, plus \$5,000.00 from General Funds for Physical Therapy, plus \$135,702.81 from Endowment Income Affecting Budget and \$45,890.00 from Gift Income Affecting Budget, a total of \$2,584,684.48. These total figures will have to be modified by the actual income from the special endowments and by the actual gifts anticipated. At the present moment it is not possible to give these figures accurately. In addition there is available for departmental distribution the sum of \$101,801.83 from Endowment Income for Specific Use and \$160,262.71 from Restricted Gifts, a total of \$262,064.54. It is anticipated that there will be considerable salary savings and also savings in fellowships and scholarships due to the absence of members of the faculty in various forms of war service and the fact that many of the male students will be soldiers receiving a regular soldier's pay.

Because of the special courses, which will have to be given to soldier students, it will be necessary to employ a few additional new members of the faculty in such fields as geography, anthropology, special language courses, scholars familiar with Eastern Asia and Central Europe, etc. It is anticipated that the fees received from the Government for the education of the soldiers will make provision for a large part, if not all, of these additional costs.

The general plan would be to maintain the frame of the existing budgets so that members of the faculty returning from war service can be fitted into the picture as normal conditions are resumed. Regular reports of what is transpiring will be made to the Trustees so that a running record of receipts and expenditures will be available and the Trustees can determine the financial set-up at any time.

MILITARY TRAINING UNITS

Negotiations were carried on with both the War and Navy Departments in connection with the training of soldier students. The medical students were divided about equally between the Army and the Navy, and special provisions were made for them to complete their training up to and including an intern year. A certain number of men who had selected the Navy continued their work at Stanford until called to service or to some other institu-

tion for training. There was also a number of R.O.T.C. students who after some experience in camps were sent back to Stanford for further training.

The principal military activity of the University was in the development of the units in the so-called Army Specialized Training Program (ASTP). Under date of April 2, a directive was issued by the War Department authorizing the establishing of a STAR Unit of 500 (Specialized Training Assignment and Reclassification). Subsequently the total number of this unit was increased to 1,000.

Other contracts were negotiated during the spring and summer so that the numbers which Stanford agreed to care for under contract were as follows:

1. STARU 3903	
STARS	1,000 enlisted men
2. (a) ASTU 3905 Group I (Cycle I)	
Advanced Engineers	50 enlisted men
Basic Engineers	400 enlisted men
FAL European	250 enlisted men
FAL Asiatic	100 enlisted men
FAL 9L	100 enlisted men
Pre-Medics	200 enlisted men
Total	1,100
(b) ASTU 3905 Group II (Cycle II)	
Advanced Engineers	150 enlisted men
FAL	100 enlisted men
Psychologists	100 enlisted men
Total	350
3. SCU 3944	
Second-Year Advanced R.O.T.C.	53 enlisted men
4. Civil Affairs Training School	49 officers
Grand Total	2,552
(c) The increase of 200 Advanced Engineers and the early return of 135 First-Year Advanced Course R.O.T.C. minus 35 Second-Year Advanced Course R.O.T.C. men shipped to OCS Pool on August 5 will make a total increase of 300 trainees	300
Grand Total	2,852

Arrangements were made to handle these soldier students in our dormitories and fraternity houses with messing provided for in the dining halls of the University.

The advent of these trainees required a number of adjustments. More instructors had to be appointed, special attendance records kept, and teaching procedures adopted that had been recommended by the War Department. Following a conference in June, the following self-explanatory letter was sent to members of the faculty who were working with the ASTP and the STAR Units:

In connection with the ASTP and the STAR there are certain points that must be handled with unusual care if the University is to develop proper contracts and receive appropriate returns from the War Department.

All appointments that have to do with work in instruction must pass through the President's Office. All such appointments must be for definite periods of service and if less than full-time is required the appointment must specify the amount of work involved. If less than a quarter is involved that too must be specified. All assistants or others giving instruction or assisting in instruction, even though on an hourly basis, must be appointed through the President's Office. A copy of all appointments will be filed with the Financial Vice-President and the appointments will be sent to the Board of Trustees.

The Stanford budget is based on three quarters of service out of each calendar year of four quarters. This salary is paid in twelve equal instalments. If instruction or other service is rendered in a fourth quarter on full-time there is the possibility of an addition of one-third to the salary. Under no circumstances can this go beyond that third. Service for any one of the quarters may be on a half-time basis or for some special number of hours. In past years all quarters were interchangeable. If full-time service for four quarters was given it was possible to secure an earned quarter, if permission had been obtained from the President's Office. This means that each quarter had under those circumstances the value of any other quarter. In the past many of those serving in the summer quarter did not do full-time work and they were paid on a one-sixth basis. Payment of visitors was usually on a full-time basis or an agreed-upon basis. Usually reduced amounts of teaching were required. Therefore we have established the possibility of full-time service for an additional quarter at one-third, part-time service for an additional quarter at one-sixth of the salary, or service for some specified courses at a reduced amount. Special arrangements will be necessary when those on professors' salaries are giving elementary instruction. We have been informed that proper adjustments and averages will have to be made under such circumstances.

Every instructor giving courses for ASTP and STAR students must report to the Registrar's Office each week the number of students attending classes and the number of contact hours. This report should be in duplicate. After adequate record one of these copies will be transferred to the Financial Vice-President's Office, where it becomes the basis for collection from the Government under the contract.

Aside from salaries, which must be handled as above, all other expenditures will be handled by requisition and will require the signature of the appropriate Director. Agreed upon sums will be the basis for these requisitions and they cannot be exceeded without special arrangement. Certain supplies

are in the nature of activating costs and these too will have to be kept within specified limits.

Books will be kept for each Unit but the departments concerned will maintain their budgets as usual and the books of the University will be kept along the usual lines. While there is no fixed and arbitrary schedule it is assumed that what is called contact hours will be in the neighborhood of twenty per week. In institutions like Stanford where an average of less than twelve is the rule there will have to be some stepping up, probably by twenty-five per cent, of the amount of actual work done to consider that full work is being carried. In some laboratory and other courses the contact hours would normally be beyond twenty, so that our aim will be to get an average of eighteen to twenty contact hours per week per instructor.

At once following the putting into effect of the 18-year age requirement for military service changes within the University developed. The fraternity houses were practically emptied, and the students were concentrated in the dormitories.

A hundred or more students accepted by the University under special classification from the senior year of the high school were admitted to regular courses and made records as satisfactory as high-school graduates. These students were selected from the upper group of each school. This arrangement provided the opportunity for certain boys to get some advanced training before entering on military service direct or entering one of the teaching units in one of the institutions of higher education.

The Hoover Library became the center for a unit of the Civil Affairs Training School (CATS). For the most part those joining this school were already commissioned officers.

FRATERNITY HOUSES

Arrangements were made for all four of the University dormitories for men (Sequoia, Branner, Toyon, and Encina) to be turned over to the Army for the housing of soldier students. At the same time the fraternity houses were as a group pooled with the other housing of the University and used either as residences for soldiers, officers in training, or students. The chapter houses were named after the presidents of the United States.

The management, operation, and supervision were vested in the President and the Financial Vice-President of the University. Income and expenses were to be pooled and rentals or profits divided on an equitable basis whether the chapter houses were occupied or not. A Negotiating Committee, composed of C. J. Crary, L. H.

Anderson, G. E. Carey, Shirley Baker, Charles MacDonald, and Warren Turner, represented the fraternities in the negotiations.

EFFECTS OF THE WAR

In October 1942, I made the following report to the Board of Trustees:

The registration for the autumn quarter of 1942-43 is 3,623, a decrease of 440 from the registration for the autumn quarter of 1941-42. Of these 3,623, 2,272 are men and 1,351 are women.

The impact of the war upon the University is compelling changes in many directions. Practically all students will have a shorter period of attendance and soon all male students will be subject to the draft. Many of them are already in the R.O.T.C., Enlisted Reserve, or one of the Special classifications of the United States Navy. The Army and the Navy and some draft boards are recognizing certain general training courses which cross departmental lines.

At present we have made no change in the requirements for the degree of Bachelor of Arts in so far as the requirement of 180 units is concerned. This may be necessary a little later with the general adoption throughout the nation of the continuous session plan. Congress has just placed the Military Academy at West Point on a three-year basis. In order to offer the male students courses that will be recognized by the Army, a broader basis than that of the department is necessary. The Bachelor of Arts degree has been given by Schools, with a suitable subhead. Now, instead of departmental subheads, certain groupings will be more and more required, such as Pre-Medical, Pre-Business, Pre-Legal, Pre-Engineering, etc.

The Bachelor of Arts degree will be granted in future upon the recommendation of a School or Schools on a broad basis appropriate to the conditions which the students at the University are now facing.

At the present time we have not fully determined just what shall be done about granting credit for war work or service in the Armed Forces. Certain adjustments will have to be made concerning the residence requirements.

There should be a liberalization of the residence requirement (attendance the last quarter before the degree is granted) for the various degrees, in accordance with the present conditions.

One of the most striking effects of the war has been the increased interest in instruction in modern languages, in geography, and in anthropology. In addition to these, the emphasis of the Army program was in engineering (including mathematics), physics and chemistry, biology and medicine, psychology, and in the Graduate School of Business for certain Quartermaster units. There was a marked decrease in the students in law, education, and the social sciences.

RESEARCH

The year was one of the most active that Stanford has experienced in the field of research. Much of this was carried on under grants made by various units of the government for special studies of importance in the prosecution of the war. The University can be very proud of the record made by the members of its staff either in our laboratories here or elsewhere. The details can be brought to public notice only after the conclusion of the war.

RESEARCH ON PROBLEMS AND METHODS OF LASTING PEACE

Funds were received from a number of sources and placed at the disposal of Mr. Hoover, Founder of the Hoover Library on War, Revolution, and Peace, to follow up the important book, *Problems of Lasting Peace*, by Herbert Hoover and Hugh Gibson.

RADIO INSTITUTE

Through collaboration of the Department of Speech and Drama with the National Broadcasting Company a successful Radio Institute was given during the summer quarter to some seventy students.

ACADEMIC CHANGES

The name of the Division of Hygiene, in the School of Health, was changed to Division of Health Education, to take effect with the beginning of the academic year 1943-44.

For the duration of the war the Graduate School of Business program was changed to meet the requirements of the military group and the School has been certified as giving an A.B. in Business Administration rather than an A.B. Pre-Business Curriculum. This change has been made since the term Pre-Business Curriculum does not appear on the list of terms acceptable to the military forces of the country. In other words, no consideration can be given by the Army toward the deferment of students registered in the Pre-Business Curriculum course.

The Chancellor was in receipt of a letter from the faculty of the School of Social Sciences requesting that the Head of the School hereafter be designated as Dean, rather than as Chairman. Following this recommendation, the Chancellor designated Professor E. A. Cottrell as Dean of the School of Social Sciences for the academic year 1943-44.

CENTRAL RECORDS AND ADDRESSING BUREAU

Upon the recommendation of the Chancellor, the General Secretary, the Registrar, and the Alumni Secretary, a plan for the development of a centralized bureau for records and addressing was authorized by the Board of Trustees. The Registrar was instructed to work out the preliminary details and procedures.

ATHLETICS

Following the policy of the Army, intercollegiate athletics were abandoned. The Board of Athletic Control, under date of May 12, 1943, presented the following resolutions which were given approval by the Board of Trustees at its June meeting:

WHEREAS, for the duration of the war men in attendance at Stanford University will be largely Army personnel, and the War Department does not favor the development of athletic teams and intercollegiate contests; and, without such contests this Board will be without adequate income to operate, and

WHEREAS, the Board of Athletic Control desires to join the University Administration in co-operating to the fullest possible extent with the policies of the War Department, and

WHEREAS, it appears that the Army will require the use of Stanford's athletic fields, equipment, and staff and that arrangements therefore must be consummated by direct contracts with the University and the War Department, and not with the Board of Athletic Control,

Now, Therefore, Be It Resolved, That the Board of Athletic Control believes it advisable and requests that the University relieve the Board of Athletic Control, for the duration, of its responsibility in connection with athletic activities at the University; that the President approve the payment by the Board of all of its outstanding financial obligations and that the remaining funds in the accounts of the Board of Athletic Control be transferred to the general fund of the University; that it be further requested that, as far as possible, the following named staff of the Board of Athletic Control, Messrs. Everett S. Dean, Marchmont Schwartz, Harry Meiggs Wolter, Ernst M. Brandsten, Henry Wilfred Maloney, Charles Myron Sprague, Alfred R. Masters, Sam McDonald, and Miss Eunice DuPrau, be assumed by the University and that every endeavor be made to maintain this staff intact in order that it be available to resume intercollegiate athletic activities with the cessation of hostilities, and that it is further recommended to the respective appointing powers that the personnel of the Board members be maintained at all times for such service as may be requested, in order to be available for resumption of intercollegiate athletics when feasible.

The Board of Athletic Control was in good shape financially. It was able to close out all of its debts, including the final payment on the Branner dormitory, and have sufficient funds available to carry through at least for one full year.

STANFORD *CHAPARRAL* (HAMMER AND COFFIN SOCIETY)

At the August meeting of the Board of Trustees the following report was made and action taken :

For some years there has been in the hands of the Board a Hammer and Coffin Reserve Fund. It has been carried in the Agency section of the University books and is now \$11,828.34. This represents a building fund for the eventual housing of the *Chaparral*.

Some years ago an arrangement was worked out and reported to the Trustees by which the group running the magazine was to be responsible directly to the President of the University, rather than to the Associated Students, since some of the older members of the Society were involved. Those operating the magazine have not kept their agreements. The publication has become unsatisfactory. It can no longer be continued because of the lack of personnel. The Student Manager, Mr. William R. Moran, sent a communication, under date of July 17, 1943, to the President of the Board of Trustees recommending that the plan be abrogated, with the exception of Article 15 of "The Trust Agreement and Constitution of the Hammer and Coffin Society, Stanford University Chapter," which provides for conditions of the Trust Agreement and the custody of the funds.

The Chancellor has received the following letter, dated July 21, 1943, from the President of the Associated Students :

"In reference to the copy of a letter regarding the Trust Agreement and Constitution of the Stanford Chapter of Hammer and Coffin Society by Mr. W. R. Moran, I would like to state at this time my opinions as President of the Associated Students on this matter.

"We have found in the last quarter that, in order for us to assume legal control over the Hammer and Coffin Society, it would be necessary that a clarification of the constitution of this society be made. As Mr. Moran's letter points out, the Society operates free from the supervision of the Associated Students as such supervision is defined in our constitution.

"That the Building Fund of the organization should be placed in trust with the Board of Trustees is an excellent plan. However, the organization should not stand alone in matters of financial control and general policy. May I second the recommendation of Mr. Moran that the entire document, with the exception of Article 15, be revoked.

"If this were done, and the members of the organization then desired to obtain a Charter under the government of the Associated Students, we, in granting such a charter, would assume responsibility for the actions of this organization and its separate members, a responsibility we were not able to assume heretofore.

Sincerely,

(Signed) JANET McCLANAHAN
President, Associated Students
of Stanford University"

The President of the University was authorized to work out a program by which the *Chaparral*, if it resumes publication, will be brought under the general plan for student publications of control through the Associated

Students. Further, the Trust Fund is to be retained, and the Hammer and Coffin Reserve Fund will be carried on in the Agency section until a final program for disposal is worked out with the President of the University and reported to the Board of Trustees.

RETIREMENT ANNUITIES FOR STAFF MEMBERS

In December 1942, the following resolution was adopted by the Board of Trustees:

Resolved, That, upon recommendation by the Chancellor, beginning January 1, 1943, the University make arrangements in addition to its present program with the Teachers Insurance and Annuity Association of America to take out retirement annuities, on the 5-5 basis, for members of the staff who have been in the University's employ for ten years, or longer, and who are now receiving salaries of \$2,000 or over.

FACULTY

RETIREMENTS

The following members of the faculty reached the retiring age and were given the emeritus title designated: Harry Everett Alderson, Clinical Professor of Medicine (Dermatology and Syphilology), Emeritus; John Adolph Bacher, Clinical Professor of Surgery (Otorhinolaryngology), Emeritus; Walter Kentick Fisher, Professor of Biology (Zoology), Emeritus; Yamato Ichihashi, Professor of Japanese History and Government, Emeritus.

Dr. Harold Chapman Brown was retired at the age of sixty-four for physical disability and was given the title of Professor of Philosophy, Emeritus.

Colonel Harry Bernard Allen, Professor of Military Science and Tactics, was retired from duty by the United States Army on account of age, effective September 30, 1943.

It is a privilege to record the gratitude and appreciation of the University for the faithful and effective services which have been rendered over the years by these faculty men.

ABSENCES

Sabbatical leaves of absence for the academic year 1943-44 have been granted to the following: Warren D. Allen, organist, and professor of music and education; James Emmet Brenner, professor of law; Oliver Erasmus Byrd, associate professor of hygiene and physical education, and director of health education; Albert Guérard, professor of general literature (autumn quarter); Gray-

son N. Kefauver, professor of education and dean of School of Education (autumn quarter); Helen Brenton Pryor, professor of hygiene and medical adviser of women; John Robert Reid, associate professor of philosophy; Graham Stuart, professor of political science (autumn quarter); Payson J. Treat, professor of history; Helen Ella True, executive secretary, president's office.

RESIGNATIONS

The following members of the instructing and administrative staff resigned during the year or at its close: Virginia B. Atkinson, assistant to director of dining halls; Mildred Alladine Bell, acting instructor in speech and drama; Hadley Robertson Bramel, acting assistant professor of mining; Carol Brice, bibliographer, library; Henrietta Kathleen Carpenter, instructor in secretarial training (Graduate School of Business); John R. Clark, instructor in metallurgy; Justus Kent Clark, acting instructor in English; Mabel E. Clark, secretary in mining engineering; Benjamin Paul Davies, assistant professor and examining physician, School of Health; Burt Lincoln Davis, Jr., clinical consultant, Men's Health Service; Clarence Fielstra, instructor in education; Grace Roberta Glenn, director of Roble Dining Hall and lecturer, School of Health (Women); Morton Hamermesh, instructor in physics; Edward August Krug, acting assistant professor of education; William Sherwood Lawrence, instructor in pharmacology; Clara Lou McCaskill, instructor in nursing; Henry Forbes McCreery, instructor in history; Henry Miller Madden, instructor in history; Katherine Murray, secretary in psychology; Edward Gene Nelson, assistant professor of economics; Louise Shoup, acting instructor in English; Violet L. Shue, curator special collections, Library; Rixford Kinney Snyder, instructor in history; Maurice Lane Tainter, professor of pharmacology; Virginia Voorheis, secretary, Department of Physics; Lynn Townsend White, Jr., professor of history; James Wylie, advisory coach, rugby; Wilmer Wheelon Young, teaching specialist in foundry.

PROMOTIONS

The following promotions take effect with the beginning of the academic year 1943-44: Associate Professor Frederick Otto Koenig (in chemistry) to the rank of professor.

Assistant Professors Harold Maile Bacon (in mathematics); Karl Franz Bode (in economics); William George Hoover (in

electrical engineering); Hadley Kirkman (in anatomy); John W. Masland (in political science); Juan B. Rael (in Romanic languages); George Frank Sensabaugh (in English); S. Cowles Strickland and H. Donald Winbigler (in speech and drama), to the rank of associate professor.

Instructors Seville Chapman (in physics); Donald Paul McKelvey (in speech and drama); Gretchen Ann Magaret (in psychology); Lockhart B. Rogers (in chemistry); Ralph A. Seban (in mechanical engineering); Ralph Judson Smith (acting), in electrical engineering, and Robert Turner (in anatomy), to the rank of assistant professor.

Teaching assistants Robert Hastings, in pharmacology, and Victor J. Lindskog, in physical education, to the rank of instructor.

ONE OR TWO-QUARTER APPOINTMENTS

The following were appointed to serve for one or two quarters: Albert Howard Clodius, in history (autumn), as instructor; Frederick Crescitelli, in physiology (autumn and winter), as acting assistant professor; Edward J. Demson, in journalism (spring), as lecturer; Graham Phillips DuShane in biology (spring and summer), as acting assistant professor; Wilbur Harvey Dutton in education (spring), as acting instructor; Ralph Ebner in physical education (winter), as advisory coach, rugby; Ralph Raymond Fields in education (spring), as acting assistant professor; Samuel Augustus Francis in physics and mathematics (winter and summer), as teaching specialist and lecturer; Baxter Melson Geeting in speech and drama (autumn and winter), as acting assistant professor; Earnest S. Greene in physics (spring and summer), as teaching specialist; Walter Rider Hedeman, Jr., in physics (autumn and winter), as acting instructor; Mary Virginia Hungate in chemistry (spring), as acting instructor; Paul DeHart Hurd in education (spring and summer), as acting instructor; Vern James in Graduate School of Business (winter), as lecturer; Helen Jeanette Johnston in School of Health (physical therapy) (summer), as acting instructor; Robert Lord Kirkwood in electrical engineering (spring and summer), as acting instructor; Frank Bernard Lessman in civil engineering (winter), as lecturer; Gwynne Nettler in economics (winter), as acting instructor; Thomas Minton Newell in journalism (autumn), as instructor; James C. Nute in journalism (winter and spring), as lecturer; Thomas E. Oliver (autumn), as acting chaplain; John Pagini, Jr., in economics (autumn), as acting

instructor; Herbert Kittredge Reynolds in journalism (winter), as lecturer; Joseph M. Running (autumn and winter), as assistant organist; Wayne Winfield Smith in civil engineering (winter), as acting instructor; Olof Ernest Stamberg in chemistry (autumn), as Protein Research Fellow and research associate; Luise L. Strothmann in German (summer), as instructor; Ralph Ira Thayer in economics (summer), as acting instructor; Miguel Tirado in Romanic languages (summer), as instructor; Jozo Tomasevich in Food Research Institute (autumn and winter), as acting assistant economist.

NEW APPOINTMENTS

The following have been appointed as members of the faculty beginning with the academic year 1942-43; Henry D. Collier (consulting), Graduate School of Business; Paul F. Cressey (acting), School of Humanities; William R. Dennis (acting), in philosophy; John R. Eden, in military science and tactics; Paul Fejos (consulting), School of Humanities; Felix M. Keesing, in School of Humanities; C. Langdon White, in School of Humanities, as professors.

Charles Louis Ianne, in School of Health, and John Brown Mason (acting), in political science, as associate professors.

Harlen Martin Adams (acting), in speech and drama;* Virginia F. Harger in School of Health (Women); Stephen M. Kuhnle, in social sciences;* Carl G. Lindquist (acting), in chemical engineering;† Charles W. Lomas (acting), in speech and drama; Harry T. Mercer (acting), in English; Wilber H. Moreland (acting), in physics;† Mark Neuhof (acting), in chemistry; Clarkson H. Oglesby in civil engineering; Frank Fred Petersen, in mechanical engineering, and Brainerd Plehn (acting), in civil engineering, as assistant professors.

David Lee Bassett, in anatomy;* Jean Bellinger, in physical education (women); Russell W. Bernhard, in medicine (radiology); Helen Borkowski, in Slavic languages; Paul Delos Boyer, in chemistry;* Renée Brand, in Germanic languages; Grace M. Brown, in Germanic languages;* Ernest Giusto Catalano, in Romanic languages;* Wallace Dayton Clark, in obstetrics and gynecology;* John Allan Conley (acting), in English; Virgil B. Dishongh, in

* Began in summer.

† Began in spring.

social sciences; Robert Murray Parker Grinnell, in history; Millard Walter Hastay (acting), in economics;* Virgil Eugene Hepp, in surgery (otorhinolaryngology);* Ellen Hill, in social sciences; Marjorie L. Hoffman, in mathematics;* Jere Clemens King, in history;† Muriel B. Lievsay (acting), in speech and drama; Harvard Lomax, in mechanical engineering; John William Mackey (acting), in English; Helen Marchand, in School of Health (Women); Giacinto Matteucig, in Romanic languages;* Willard Merle Meininger, in medicine; Jo Morgan, in Germanic languages;* Edward Wesley Mumby, in physical education;† George J. Peavey, in speech and drama; Norman Philbrick, in speech and drama;† Victor Richards, in surgery;* R. Max Rogers, in Germanic languages;* Luigi Domenico Sandri, in Romanic languages;* Roberto Benaglio Sangiorgi, in Romanic languages; Otto E. L. Schmidt, in medicine (dermatology); Alice Helene Schulz, in Germanic languages;* Allen Spitzer, in School of Humanities;* Lillian Stephany, in Germanic languages;* Gladys N. Stilson, in psychiatric nursing, and supervisor, Psychiatric Nursing Service; Mary Virginia Sunseri, in mathematics;* Clarence M. Tinsley, Jr., in medicine;* Dallas A. Tueller, in history; Theodore E. Verhaaren in Germanic languages;* Rae O. Wirtz, in Graduate School of Business, as instructors.

Ronald Stone Anderson and Holbrook Bonney, in School of Humanities;* Norbert Fuerst, in Germanic languages;* Emanuel Gonick, in chemistry;* Joseph E. Williams, in School of Humanities, as lecturers.

Anthony M. Ambrose, in pharmacology; William Berg and Morgan Harris, in biology; Henry W. Elliott, in physiology; Alfred Goetzl and John Luther Mohr, in Hoover Research Institute; Peter Koets, in obstetrics and gynecology;* Daniel C. Pease, in biology (Hopkins Marine Station), as research associates.

Henry Edward DeFeo, Edwin Elmer Hobby, and Edward James Strick, as examining physicians, Men's Health Service; Carlos Martinez-Duran, as honorary consultant on Guatemalan medicine and medical history; Donald L. Mason as teaching specialist in foundry practice (mechanical engineering);† Lawrence Richey, as honorary curator, Hoover Library; Rafael Heliodoro Valle, honorary curator, Mexican Collection, Hoover Library; D. Sterling Wheelwright, as acting organist and lecturer in music.

* Began in summer.

† Began in spring.

DEATHS

The University was greatly saddened by the loss by death of nine members of the faculty.

Rennie Wilbur Doane, professor emeritus since 1936, died at his home on the Stanford campus on December 1, 1942. The following resolution was adopted by the Academic Council on December 16:

Professor Doane's connection with Stanford University is a long one. He entered in 1891 with the first class destined to receive all of its training at Stanford. At first he majored in English but in 1894, attracted by Professors Comstock and V. L. Kellogg, he took up the study of entomology and graduated in this field in 1896.

Following his graduation he went to Washington State College, where he taught in zoology and entomology until 1901, rising to the rank of assistant professor. His next position was at the Fisheries Experimental Station at Port Orchard Bay on Puget Sound, where he served as superintendent for five years. Much of his work during this period was devoted to investigation of the native oyster, an important natural resource of the state.

In 1905 he was called back to Stanford University, where he was to play an important part in the development of economic entomology. Here he taught until his retirement as professor of biology in 1936. His twenty-one-year period of service was broken only by two scientific trips to the South Pacific. During many years of this period he served as chairman of the Madero Mosquito Abatement District and acted as consultant in a number of cases of reported damage from smelter fumes.

His writings were almost wholly in the field of economic entomology. Aside from articles in scientific periodicals, he was the author of several books, of which the earliest was *Insects and Disease* (London, 1910). In 1923 he collaborated with Vernon Kellogg in writing an elementary textbook of economic zoology and entomology. The most recent book was *Forest Insects* of which he was senior author. Collaborating in this volume were E. C. Van Dyke, W. J. Chamberlin, and H. E. Burke (New York, 1936). He contributed to the memorial volume to Vernon Kellogg and left in manuscript a collection of pleasing "Stories of Spiders for Children."

In his death Stanford University has lost a devoted teacher and the Stanford faculty a kindly and unassuming colleague whose period of service linked him with Dr. Jordan, Dr. Kellogg, and others of the Old Guard in zoology.

The undersigned recommend that these resolutions be spread upon the minutes of the Academic Council and that copies be sent to the family and to the Board of Trustees.

Dr. Clark Wilson Hetherington, professor of physical education, emeritus, died at the Palo Alto Hospital on December 27, 1942.

Dr. Eric Liljencrantz, assistant professor of medicine, on leave as Commander with the Navy's Medical Corps since November 1940, was killed in an airplane accident at Pensacola, Florida, on

November 6, 1942. The Academic Council at its meeting on December 16, 1942, adopted the resolution from which the following is quoted :

Commander Eric Liljencrantz (M.C.), U.S.N.R., was killed in an airplane accident at Pensacola November 5, 1942. He was engaged in war research at the moment of his death. He was on leave from this Medical School, with the rank of Assistant Professor of Medicine (Radiology).

Eric Liljencrantz was born in Oakland, California, in 1902. He was educated at the University of California, Williams, and Stanford, getting his A.B. here in 1925 and his M.D. in 1929. He spent his intern year at Alameda County Hospital and entered practice with his father. In 1929 he left for graduate work in surgery at the University of Kiel and later at the University of Berlin, being gone more than a year. He was appointed Assistant in Medicine at Stanford in 1931, but returned to practice with his father. In 1934 he came here as instructor in medicine and devoted himself to therapeutic radiology. He organized the Tumor Clinic and was its chief. He was also Visiting Radiologist to the San Francisco Hospital and Consultant in Neoplastic Diseases to United States Naval Hospital, Mare Island, and to United States Marine Hospital, San Francisco. He was surgeon to William Beebe's Oceanographic Expedition on Templeton Crocker's yacht, "Zaca," for the second cruise (six months).

In 1932 he entered the Naval Reserve and learned to fly, becoming one of the early flight surgeons. He organized the Oakland Naval Base Hospital Unit. During his later years at Stanford he gave part time to Pan-American Airways, developing their first Medical Department, and setting the pattern for the medical departments in their other divisions. He was certified by the American Board of Radiology in 1940. He edited the *Cancer Handbook*, published by Stanford University Press in 1939. In October 1940 he asked for active duty and was sent to the Bureau of Aeronautics at Washington, where he prosecuted and directed essential research in flight physiology and acted as a close link between the Navy and those of the National Research Council who were working in this field. Later he was transferred to the Bureau of Medicine and Surgery, but with the same duties, which he discharged with unusual tact and success.

His father and mother live in Oakland. His brother is with the Army (Artillery) in Alaska. His wife and seventeen-year-old daughter remain in Washington.

Eric Liljencrantz was loved and admired by all his associates. Stanford will be much the poorer that he did not live to come back and take his place again in the Medical School. We deplore and mourn his untimely death.

Resolved, That copies of this resolution be sent to his widow and daughter, to his father and mother, and to his brother.

Lillian Jane Martin, professor of psychology, emeritus, died in San Francisco on March 26, 1943. The Academic Council at its meeting on April 2, 1943, adopted the following resolution :

The death of Lillian Jane Martin, emeritus professor of psychology, on

March 26, 1943, closed an interesting and colorful career, and a professional life which was a model of fidelity to strong and abiding interests.

When Professor Martin graduated from Vassar College in 1880, Dr. David Starr Jordan recommended her for the position of science teacher in the Indianapolis High School, where he himself had once taught. Later she joined the faculty of the Girls High School in San Francisco as head of the Science Department. In the high school, her teaching fields were botany, physics, and chemistry.

In 1894, at the age of forty-three, Professor Martin resigned her teaching position in San Francisco and left for Germany to study psychology, which had been an active interest since her early adolescence. She entered the University of Göttingen as one of the first women students in science. Her studies and research in Göttingen were directed by Professor G. E. Mueller, one of the leaders in the then young science of psychology. During the four years at Göttingen, she worked in general psychology and also in such diversified special fields as esthetics, therapeutic hypnosis, and the psychology of humor. Between 1899 and 1914, she returned to Germany during alternate summers for further studies. Her publications include four psychological monographs in the German language: one of them completed in collaboration with Dr. Mueller has been referred to, in E. G. Boring's *History of Experimental Psychology*, as one of the classics in psychophysics. Professor Martin returned to the United States in 1898 and the following year was called to Stanford University by Dr. Jordan as assistant professor of psychology. Dr. Martin was among the early pioneer group of women psychologists. At Stanford, in addition to her work in introductory courses in general psychology, her fields of interest were esthetics, abnormal psychology, and advanced experimental psychology. She took a personal interest in her students and did as much for their personality development as for their advancement in knowledge of theoretical principles.

During the twenty-seven years since her retirement from Stanford, Dr. Martin has amazed her friends, not only by her energy and the breadth of her interest, but also by her capacity to blaze new trails in human welfare work. In 1920 she established in San Francisco a mental hygiene clinic for normal children of the pre-school years and about ten years later established a psychological clinic for aging men and women called the Old Age Center. She dealt with over a thousand cases at the Center. As a phase of her kindly and sympathetic interest in elderly persons, Dr. Martin in her late seventies ran a farm for several years and gave employment to a group of elderly men. During the past two decades, while carrying on an active clinical service for children and adults, she found time to write several books and numerous articles on various psychological topics.

This heavy program of professional work, however, represented only a part of the activities of this emeritus professor. She learned to typewrite at sixty-five and to drive a car at seventy-eight; she drove across the continent twice thereafter. After her retirement she was able to travel widely. At seventy-four she went around the world and at seventy-six traveled to Russia alone. At eighty-eight, Dr. Martin spent a year in travel in South America during which she made the journey up the Amazon by boat. Her life was full and interesting to the day of her death.

Dr. Martin had a wide circle of friends and was deeply loved and admired by her colleagues and students in her many and diversified professional associations.

Be it resolved, therefore, That we, the Academic Council of Stanford University, express our appreciation of the useful services of Lillian Jane Martin to the University and of our high regard for her accomplishments for the improvement of human life; further, that we record in the minutes of the Council this memorial to her as a brave and kindly teacher, one of Stanford's most interesting personalities; and that a copy of this statement be sent to her niece, Mrs. William Martin Kaiser, together with an expression of the sympathy of the Council.

Norman John Silberling, professor of business research in the Graduate School of Business, died at his home in Palo Alto on October 18, 1942. The Academic Council at its meeting on December 16, 1942, adopted the following memorial:

Dr. Norman J. Silberling, professor of business research in the Graduate School of Business, died very suddenly from a heart attack on Sunday, October 18, at his residence in Palo Alto. He had been granted leave of absence for the autumn quarter in order that he might complete his book, *The Dynamics of Business*, which represents many years of research in the field of business fluctuations and embodies its author's philosophy respecting this important field.

Dr. Silberling was born in Cleveland, Ohio, in 1892. It was in the schools of Cleveland that he received his preparatory training for his nine years of study at Harvard University. Early in his undergraduate days at Harvard he developed a keen interest in economics and, after receiving the Bachelor's degree, *magna cum laude*, in 1914, he entered that field as a graduate student, receiving the Master of Arts degree in 1915 and Doctor of Philosophy in 1919. His doctoral dissertation on the "History of Theories of Money and Credit from Adam Smith to John Stuart Mill" exhibited ability of a high order. The following year, Dr. Silberling was appointed instructor in the Department of Economics at Harvard, and during 1920-21 held an assistant professorship at Dartmouth College.

A year later he accepted a call to the University of California as associate professor of economics, receiving his full professorship in 1929. In 1930, his status was changed to that of part-time lecturer in order that he might give more of his time to the research organization which he had established in San Francisco, and later he moved to Palo Alto. In 1935 he was appointed to the position in the Graduate School of Business which he held at the time of his death.

Dr. Silberling was an able and inspiring teacher but his major interest lay in financial research. His greatest satisfaction came from his labors in what he chose to call the sphere of business dynamics. His book in this field, which fortunately he had completed with the exception of minor revisions in the later chapters, is an outstanding contribution and will serve as an enduring monument to a brilliant scholar and untiring worker.

From time to time Dr. Silberling published in the leading journals, ar-

ticles in the field of finance and statistics. At the time of his death he was vice-president of the American Statistical Association and Stanford University's representative on the Universities-National Bureau Committee on Co-operative Research in Economics.

In this untimely passing of our colleague the Graduate School of Business and Stanford University have lost a great scholar and able teacher and the members of the faculty a delightful associate and wise counselor.

Your committee requests that this memorial be made a part of the minutes of the meeting of the Academic Council and that a copy be sent to the family of Dr. Silberling.

John Otterbein Snyder, professor of zoology, emeritus, died on August 19, 1943. The Academic Council passed the following resolution at its meeting on October 15, 1943:

On August 19, 1943, death removed John Otterbein Snyder, a man who had served the University faithfully and often brilliantly, for a half-century, from the ranks of Stanford's emeritus professors. He was born in Butler, Indiana, on August 14, 1867, and was led into a lasting interest in nature by his father, a minister in the United Brethren Church.

Young Snyder was a born collector, and while still a schoolboy made large collections of birds and bird eggs, from which he sold duplicates while in high school for enough to purchase a microscope. After graduating from high school, he taught for two years at Cedar Lake, Indiana; but he was not satisfied with only a high-school education, so spent the academic year of 1890-91 as a student in Indiana University. There his contact with Dr. David Starr Jordan terminated a period during which he had been undecided between continuing teaching in the grade or high schools and going on through college, and definitely committed him to a career as a zoologist. During the school year of 1892-93 Mr. Snyder was a student at Stanford. The next year, in order to earn money to remain in college, he was superintendent of schools at Pullman, Washington. He returned to Stanford, graduated in 1897, and received the degree of Master of Arts in 1899. He was appointed instructor in zoology the same year and continued to serve on the faculty until his retirement in 1932.

The years from 1897 onward were marked by strenuous field work, meticulous laboratory and museum research, and the publication of numerous papers dealing with the fishes, birds, and mammals of western North America and the Pacific area. He accompanied Dr. Jordan on long field trips to Mexico, Japan, and Hawaii, and served as naturalist on the United States Fish Commission research vessel "Albatross" on several occasions between 1902 and 1906. He served also, at various times, with important federal and state agencies dealing with fisheries problems. In 1914 Professor Snyder was called to the United States National Museum, where he spent a year putting the vast ichthyological collections in order. He was offered a permanent position there, but he was prompted by his staunch loyalty to Stanford University to decline the offer. His relations with the men in the United States Fish Commission remained cordial, however, and he was a field assistant to that body much of the time between 1897 and 1930. In 1925 he was director of the Bureau of Fisheries Marine Laboratory at Woods Hole, Massachu-

setts, but when the year was completed he again turned joyfully toward Stanford.

From 1919 to 1931 Professor Snyder was a consultant and advisory fisheries expert for the California State Fish and Game Commission, and in 1931 was appointed chief of its Bureau of Fish Conservation. He held this position for five years and placed the work of the state fish hatcheries and the reclamation work of the bureau on a sound scientific basis. Under his administration this bureau became one of the leading agencies in the United States for the propagation and distribution of game fish.

Professor Snyder early became an active member of the California Academy of Sciences, was a member of its council for six years, and served as corresponding secretary for the Academy from 1920 to 1926.

Professor Snyder's understanding, devotion, and helpful interest in the younger men and women who came under his influence were conspicuous traits of his character. Typical of his interests, he regularly organized extended field expeditions on which he frequently took several younger men. His methods in the field were systematic, thorough, and ingenious, and his field notes were models of accurate observation and careful recording. The training he gave on those trips, chiefly by example, was incomparable. And training apart, the delightful comradeship and refreshing days in the open with "J. O." have remained high lights in the lives of many of the students who were privileged to experience them. His bird classes attracted many general students who were accorded the same patient, understanding attention he gave to candidates for advanced degrees in zoology.

Be it resolved, therefore, That this tribute to Professor Snyder's service-filled life be spread upon the minutes of the Academic Council, and that a copy be sent to his wife, to his daughter, Miss Evelyn H. Snyder, and to his son, Corporal Cedric O. Snyder.

Alfred Baker Spalding, professor of obstetrics and gynecology, emeritus, died in San Francisco on November 27, 1942. The Academic Council at its meeting on January 8, 1943, adopted the following resolution:

The Faculty of Stanford University deeply regrets the death of Dr. Alfred Baker Spalding, professor emeritus of obstetrics and gynecology, on November 27, 1942, at the age of sixty-eight.

Dr. Spalding joined the Stanford Faculty in 1912 and became a nationally recognized authority in his specialty. He created an outstanding Department of Obstetrics and Gynecology, improved the teaching of his specialty, and made important contributions to the knowledge of obstetrics and gynecology. His untiring and sincere efforts in behalf of the Medical School during its formative period and his sound teaching throughout his career will be gratefully remembered by the medical faculty and his former residents and students.

Cyrus Fisher Tolman, professor of economic geology, emeritus, died in Spokane, Washington, on October 13, 1942. The Academic Council at its meeting on January 8, 1943, adopted the following resolution:

Cyrus Fisher Tolman, professor emeritus of economic geology, died suddenly at Spokane, Washington, on October 13, 1942, in the course of a professional trip. For nearly two years, as consulting geologist for Henry J. Kaiser Company, he had devoted most of his time to a survey of the ores of magnesium and iron available in the Western states. He had always led an active, vigorous life, but the arduous trips by airplane and the excessive work both in office and field probably shortened his life. Warnings to take life more easily were laughed off. To die in the harness would undoubtedly have been his preference if he had been allowed a choice.

Born in Chicago in 1873, Professor Tolman graduated from the University of Chicago in 1896. As the school did not at that time afford professional training in economic geology, he went, after a brief service in the Army during the Spanish-American War, to the Territory of Arizona and there took part in the active development of the Southern copper district. There he learned mining geology by intimate study in the field. For a decade or more he was a consulting geologist, visiting mines in various parts of southwestern United States and Mexico.

During that interval he also served for six years as professor of economic geology at the University of Arizona in Tucson and for one year as territorial geologist, before Arizona became a state. In 1912 Dr. Branner invited him to Stanford as associate professor of economic geology. He retired from active duty in 1938.

At Stanford, Professor Tolman reorganized the important summer course in field geology, setting up professional standards and making it perhaps the best in the country. It was as head of the summer field parties out in the mountains that he acquired the informal title of "Chief," by which he has ever since been known to his students. In class and laboratory he proved to be a most effective teacher, clear and interesting in lectures, and inspiring in field and laboratory research. He always took a deep personal interest in his students and continued to help many of them long after graduation. Their warm regard for him was shown by their contribution of a fund in 1938-39 to establish in the name of his son, John van Steen Tolman, a Scholarship in Economic Geology. Professor Tolman's friends in the faculty, the community, and among his students will doubtless remember him best for his kindly disposition, his witty stories, and his genial companionship.

In his own field Professor Tolman made important contributions to an unusual variety of subjects. While in his earlier years the geology of copper deposits claimed most of his attention, after he came to Stanford he turned to petroleum geology and afterwards to gold mining in the Sierra Nevada. In later years he became one of the two leading American authorities on the geology of underground water, and his book on that subject is now standard.

For more than forty years Tolman was a busy consultant on geologic problems for various corporations and municipalities in western United States and Hawaii. His services were prized for his accuracy, thoroughness, and sound judgment. Combining the outlook of the engineer with that of the research scientist, he had a ready comprehension of the problems of industry and stood high among the economic geologists of the Pacific Coast.

It was a trait of character that made him readily adaptive to miners as well as engineers, to company executives and politicians, and even to Mexican

peons. Being a prodigious worker, he found no time to avail himself of sabbatical years, and his vacations generally consisted merely of a change from the classroom to field work. His rather short bibliography is deceptive in that it does not include the many detailed geologic reports he wrote for his clients. It was his hope, often expressed but unfortunately not realized, that in his last years he would be able to retire from professional work and write for publication some of the general results of his varied studies.

Be it therefore resolved, That these words of appreciation be recorded in our minutes and a copy of them be sent to the family of our departed colleague.

Julian Mast Wolfsohn, clinical professor of medicine (neuro-psychiatry), died on July 1, 1943.

SUMMER QUARTER

The following is a list of the visiting members of the faculty for the summer quarter of 1943, and the departments in which they taught :

Elizabeth Roseberg, Milwaukee Downer College, acting professor of German. Albert Lesh, in mechanical engineering; Lawrence Dale Leslie, San Jose State College, in biology; Gladys L. Potter, Long Beach City Schools, in education, as acting assistant professors. Chester D. Babcock, Seattle Public Schools, in education; Martha Edith Springer, in biology (botany) and acting curator, Dudley Herbarium; Richard Hanson Coe, in chemistry; William Harold Levers, in electrical engineering; Helen Rachford, in education, as acting instructors.

Samuel B. Dickson, Floyd Farr, John Boyer Grover, Donald Robert Hall, Earl Lee, Donald Frederick Martin, and Jennings Pierce, as lecturers in speech and drama (Radio Institute). George A. McCallum, San Jose State College, in chemistry; Arthur Russell Moore, University of Oregon, in physiology (Hopkins Marine Station); Charles Chester Morris, United States Public Roads Administration, San Francisco, in civil engineering, as lecturers.

STANFORD FUND

Annual direct gifts and gifts held by trustees for Stanford reached the pleasing total of nearly one million dollars. The exact figure for the year was \$999,362.56, bringing the total of gifts for the past four years to over four and one-half millions.

More than 2,500 donors joined in expressing through gifts their

desire that the University maintain and expand its position as an independent, gift-supported institution.

Gifts were received from individuals in forty-five states, three territories, and four foreign countries.

The Stanford Fund, described as "an organized volunteer movement for the purpose of increasing the flow of gifts to Stanford University," has its activities divided into two sections: the Committee on Special Gifts, Trusts, and Bequests, and the Committee on Annual Appeal. The personnel of these two committees during the past year was:

James D. Adams	Mrs. John A. Kohler
Verner Allen	E. B. Krough
Guy C. Bowman	L. W. Lane
Chilton R. Bush	E. J. McClanahan
Esther B. Clark	Donald Manchester
Robert C. Crary	Roy E. Naftzger
Ben C. Dey	Floyd A. Parton
George A. Ditz	Herbert K. Reynolds
John W. Dodds	L. H. Roseberry
Earl S. Douglass	Edwin W. Schultz
David E. Faville	Leon Sloss, Jr.
Louis Ferrari	Richard C. Smith
W. P. Fuller, Jr.	Lloyd C. Stevens
Mrs. Roger Goodan	Frederic E. Supple
Morgan A. Gunst	Donald B. Tresidder
Paul R. Hanna	Frank F. Walker
Catherine Harroun	Percy A. Wood
K. C. Ingram	

GIFTS TO THE UNIVERSITY

SPECIAL GIFTS

From many and varied sources the University continued to receive helpful gifts during the year. It is with particular gratification that a gift-supported institution, such as Stanford is, acknowledges the encouragement of its many friends. Some of the gifts of special interest are listed below:

MARY VIRGINIA FORD ESTATE

From the Mary Virginia Ford Estate of San Francisco there was received the sum of \$145,361.34, which has been set up as an unrestricted general endowment of the University. Under terms of the will, Stanford received this sum as a one-fourth interest in the residue of the estate after the payment of various specific bequests.

ESTABLISHMENT OF HOLT FUND

The William Armfield Holt and Ethel Rhodes Holt Fund was established with a gift of \$50,000 from Mr. and Mrs. William A. Holt of Los Angeles. The fund after certain life reservations is to be used "in furthering the general objects and welfare of Stanford University."

JOSEPH HORTON KILE ESTATE

The sum of \$64,000 was received as a partial distribution from the estate of Joseph Horton Kile of Stockton to be used, according to terms of the will, "for the creation of trust funds, the income thereof and five per cent of the principal, if so desired by the beneficiary, each year in furthering the purposes and objects of" the University. The money represented a fifty per cent residual interest in the estate.

THE LAWRENCE NEWMAN TRUST

As a result of the partial distribution of the Lawrence Newman Testamentary Trust under the trusteeship of the Security First National Bank of Los Angeles, the University received \$72,360 for the Lawrence Newman Trust Fund. Under terms of the will, the gift is without restrictions.

RAY LYMAN WILBUR FUND

The Ray Lyman Wilbur Fund was established in honor of the retiring Chancellor with initial gifts received from the Associated Students of the University, Mr. and Mrs. George A. Ditz, Mr. Leon Sloss, Jr., Mr. and Mrs. Herbert Hoover, Mr. Allan Hoover, and Mr. Herbert Hoover, Jr.

THE MEMORIAL FUND AT STANFORD

The Memorial Fund was established by the Board of Trustees in order that small memorial gifts might be given fitting recognition. Each gift is used to purchase one or more books for the University Library. The books carry memorial bookplates inscribed with the name of the person in whose memory the gift was made as well as the name of the donor. During the initial months of operation of the fund, the sum of \$146.50 was received. Most of the gifts were in memory of Stanford alumni who died in action on battlefronts over the world.

THE JACKS PROFESSORSHIPS

In connection with the trust fund that is already established which will bring to the University a sum variously estimated at \$400,000 to \$600,000, there were established at Stanford two professorships to be known as the Lee Jacks Professorship of Child Education and the David Jacks Professorship of Higher Education.

RESEARCH IN TROPICAL MEDICINE (PACIFIC ISLANDS)

Several foundations contributed funds for research, publications, and teaching in the field of tropical medicine of the Pacific islands under the direction of Mr. Edward P. Mumford, research associate, Hoover Research Institute. Among those contributing were the Rosenberg Foundation, the American Foundation for Tropical Medicine, the Ella Sachs Plotz Foundation, the Carnegie Corporation of New York, and the Josiah Macy, Jr., Foundation.

PHYSICAL THERAPY WORK

For Physical Therapy work in the School of Health, the National Foundation for Infantile Paralysis gave \$21,340, while the W. K. Kellogg Foundation contributed \$4,000 to the University. The Foundation for Infantile Paralysis also gave \$10,645 to the Poliomyelitis Fund of the Medical School.

INSTITUTE OF AMERICAN HISTORY

Several donors contributed for the establishment and support of the Institute of American History under the guidance of Professor Edgar E. Robinson. The Institute provides for conferences of teachers of American history and for research and publications in that field. As of December 17, 1942, the donors included: May T. Morrison Trust Estate, \$5,000; Mr. W. W. Crocker, \$2,500, Mr. C. O. G. Miller, \$2,000, and C. M. Goethe, \$50.

COMMITTEE FOR INTERNATIONAL EDUCATION

The work of the Liaison Committee for International Education under the chairmanship of Dean Grayson N. Kefauver of the School of Education was supported during the year with gifts of \$7,500 from the May T. Morrison Trust Estate and \$5,000 from the Columbia Foundation.

ERIC LILJENCRA NTZ MEMORIAL

The Eric Liljencrantz Memorial Section on Aviation Medicine in the Lane Medical Library was established with gifts of \$830 in memory of Dr. Liljencrantz, assistant professor of medicine (radiology). The fund was started with \$100 from the Hewlett Club.

JULIAN WOLFSOHN MEMORIAL FUND

Many friends of the late Dr. Julian M. Wolfsohn, clinical professor of medicine (neuropsychiatry), contributed to the establishment of the Julian Wolfsohn Memorial Fund, with initial gifts of \$614.

MEDICAL PROGRESS FUND

The Medical Progress Fund, organized largely through efforts of the San Francisco Hewlett Club, was established with gifts totaling \$2,005.

E. P. WILBUR ENDOWMENT FUND

The E. P. Wilbur Children's Free Care Endowment Fund has been set up with a gift of \$4,500 from Mr. Brayton Wilbur.

BRIGGS FREE BED FUND

From the Briggs Trust there was received the sum of \$4,000 for the Wallace H. Briggs Free Bed Fund.

WOODSIDE PROPERTY

Land in Woodside totaling 38.632 acres and having an estimated value of \$13,521 was presented to the University by Mr. Leonard C. Hammond. The gift is unrestricted.

CARMEL-STANFORD HOUSE

Mrs. Edith B. Shuffleton of Fairfax, California, presented to the University her Carmel property which had been operating as a hospital and later as "Forest Lodge," to be used for some appropriate University purpose. It is to be occupied by one of the staff of the Hopkins Marine Station (some six miles distant) and to be available to visiting scientists. With the resumption of normal activities it will be an invaluable and much-needed addition to the Marine Laboratory. It will be known by some such title as "Carmel-Stanford House" and will fill the lack which we have had at the Marine Station of housing facilities for visitors desirous of availing themselves of the uniquely rich marine life of the Monterey Bay region.

MEMORIAL CHURCH SPIRE FUND

The Restoration Fund for Memorial Church Spire was established with an initial gift of \$5,000 from Mr. Carl Breer of Detroit. The original spire was destroyed in the earthquake of 1906.

"WHO'S WHO IN LATIN AMERICA"

From the Office of the Co-ordinator of Inter-American Affairs the University received \$7,500 as a grant-in-aid toward the cost of publication of a revised and enlarged edition of *Who's Who in Latin America*, originally edited by the late Professor Percy A. Martin.

ANNUAL CHEMISTRY AWARD

An annual award of \$20 to an outstanding student in general chemistry for each of the next five years has been made possible through a gift of \$100 from Professor Philip A. Leighton, executive head of the Department of Chemistry. The award is to be made upon the recommendation of the Phi Lambda Upsilon Chemical Fraternity with the approval of the executive head of the Department of Chemistry.

CHILD PSYCHIATRY CLINIC

The Commonwealth Fund appropriated \$6,160 toward the budget of the Child Psychiatry Clinic for the academic year 1943-44.

FELLOWSHIPS AND SCHOLARSHIPS

DORIS CLAYBURGH STEINER FELLOWSHIP

The sum of \$1,000 was received from Mr. Herbert E. Clayburgh in memory of Mrs. (Babette Newman) Clayburgh for the Doris Clayburgh Steiner Fellowship in Advanced English, with the request that this money be reserved for students now in military service who will need financial assistance after the war.

MELVILLE J. JACOBY FELLOWSHIP

The Melville J. Jacoby Fellowship Fund was increased by gifts totaling \$3,562.25 received from many friends of the University. The fund was established as a memorial to the Stanford graduate and war correspondent who was killed by an airplane in Australia in 1942.

DERBY SCHOLARSHIP

The Harry Stuart Derby and Alice Urquhart Derby Scholarship has been established with the gift of \$15,653.99 from the estate of Alice D. Derby.

HARRISON MEMORIAL SCHOLARSHIP

Mrs. Nicholas M. Harrison of Pasadena has contributed \$3,000 to establish the Elston Mills Harrison Memorial Scholarship in memory of her son.

FREDERICK P. WHITAKER FUND

The sum of \$4,000 was received from Mr. Frederick P. Whitaker for the creation of the Frederick P. Whitaker Scholarship in Chemistry Fund for students proposing to specialize in industrial chemistry.

ROSE WILSON SHOUP SCHOLARSHIP

The Rose Wilson Shoup Memorial Scholarship was set up with an initial gift of \$130 from the Mothers' Club of Stanford University. Mrs. Shoup was the first president of the Mothers' Club.

MEYER LOAN FUND

Julian J. and Adele H. Meyer of San Francisco gave \$1,000 to initiate the Julian J. and Adele H. Meyer Loan Fund "to assist women students of Stanford University."

STANFORD FUTURES SCHOLARSHIP

The Stanford Futures Scholarship Fund was increased during the year by a total of \$7,829 in gifts contributed by many individuals.

VOORHEES MEMORIAL SCHOLARSHIP

Mr. and Mrs. Willard R. Voorhees of Ross established the Helen Bennett Voorhees Memorial Scholarship Fund with a gift of \$3,000.

GEORGE E. GAMBLE ENDOWMENT

The George E. Gamble Scholarship Endowment was increased during the year with a gift of \$8,458.50 from Mr. George E. Gamble.

SERVICE MEN'S SCHOLARSHIP

The Service Men's Scholarship (Dimes for Diplomas) was increased by gifts of \$3,186.02 from many friends of the University.

EDWARD R. BACON SCHOLARSHIP

The Edward R. Bacon Scholarship awards were made during the year with a gift of \$5,000 from Mr. Edward R. Bacon of San Francisco.



W. H. SLOAN SCHOLARSHIP IN CHEMISTRY

The W. H. Sloan Scholarship in Chemistry was established with the gift of \$500 from Professor W. H. Sloan, professor of chemistry, emeritus.

CHARLES E. MERRILL SCHOLARSHIP

Scholarship awards totaling \$500 were made possible through the gift to the University from Mr. Charles E. Merrill of New York City.

JAMES BIRDSALL WETER MEMORIAL SCHOLARSHIP

As a result of an additional gift of \$3,500 from Mr. and Mrs. James P. Weter to be added to the James Birdsall Weter Memorial Scholarship, the fund is now large enough so that two awards can be made: one in history and one in independent study.

H. F. ELLIOTT SCHOLARSHIP FUND

The H. F. Elliott Scholarship Fund was established with a gift of \$250 from Dr. H. F. Elliott. The fund will be administered by the Scholarship Committee, with nominations for award to be made by the Department of Electrical Engineering.

MCKINSEY & COMPANY SCHOLARSHIP

McKinsey & Company made a gift of \$750 to establish the McKinsey & Company Scholarship to be used in conduct of a research project in the field of management consulting service.

LOAN FUND FOR PHYSICAL THERAPY STUDENTS

The W. K. Kellogg Foundation contributed \$4,000 to be used as a loan fund for physical therapy students. Loans shall be made upon the recommendation of the faculty of the Division of Physical Therapy of the School of Health.

ALUMNI ASSOCIATION MEDICAL LOAN FUND

The Stanford Alumni Association Medical School Graduate Loan Fund was set up by transfer to the dean of the Medical School of funds available in the Stanford Alumni Association Graduate and Undergraduate Loan Funds, as well as funds resulting from payment of outstanding loans. It is hoped that from various sources additional money may be made available to the fund.

WOMEN'S ATHLETIC ASSOCIATION SCHOLARSHIPS

The Women's Athletic Association of Stanford University gave \$1,000 to be used for two scholarships for the academic year 1943-44.

REPORT OF THE PRESIDENT

GENERAL

(Compiled in the office of Stanford Fund)

From the donors whose names are listed here, Stanford received \$18,725.14 for special purposes, \$331,721.34 for general endowment and \$39,708.88 in unrestricted contributions for the past year.

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REPORT OF THE PRESIDENT

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To the School of Health, an electric bath cabinet, fencing equipment, miscellaneous drugs and equipment, and books

from the following donors:

Mrs. Roger Goodan	Josephine Rathbone	Mrs. A. M. Simpson
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ON WAR, REVOLUTION, AND PEACE

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The Hoover Library on War, Revolution, and Peace has received during the year 1942-43 many important and valuable gifts. Because of restrictions placed upon their contributions by a number of the donors, the Library is not at liberty to give a complete list of gifts. Owing to wartime conditions, this list necessarily is further restricted and does not include the generous gifts of many organizations, institutions, and government agencies of this and other countries. It is permissible, however, to name the following:

The Honorable Herbert Hoover and Mrs. Hoover, of Stanford University, a collection of books, documents, pamphlets, and serial publications issued during the period 1916-1928; miscellaneous contemporary materials on economic and political phases of national and international affairs and on postwar planning and problems of lasting peace; and a collection of medals illustrative of the history of Austria.

Chancellor Ray Lyman Wilbur, of Stanford University, a collection of manuscripts, letters, documents, books, pamphlets, leaflets, serials, and mimeographed materials on the present war and on postwar planning; and important additions to the Library's collection of materials of the Institute of Pacific Relations and to the Ray Lyman Wilbur Collection on Social Problems.

Belgian American Educational Foundation, Inc., New York City, through Dr. Perrin C. Galpin, President, New York City, additions to the Belgian collection, and to the materials on postwar planning.

Anonymous, miscellaneous materials in various fields of the Library.

Dr. Irwin Abrams, of Stanford University, German and British propaganda material issued in 1940.

Mr. George J. Alexander, of Victoria, B.C., a set of *Reports* of the Provincial Fisheries Department, 1914-1942.

Mrs. Ben S. Allen, of Palo Alto, a collection of Finnish Relief documents, and materials from the Roosevelt California campaign headquarters.

Mr. Riley Allen, Editor, *Honolulu Star-Bulletin*, Honolulu, a copy of his *Hawaii at War*.

Miss Nina Almond, of Stanford University, materials concerned with the present war.

Mr. Marcus Alter, of San Francisco, a copy of *Paper-Graphs*, issued by the Commercial Paper Corporation, Volume XV, November 9, containing his "War for Survival."

Mrs. M. P. Amchikov, of San Francisco, a volume containing her poem in the Russian language, *Alaska, the Russian River, and Fort Ross*.

The American Irish Historical Society, of New York City, through the Honorable James McGurkin, President-General, for the James A. Healy Collection on Irish History, Hoover Library, a file of the *Journal* of the Society, Volumes II-XXXII (1900-1941).

The American Red Cross, Washington, D.C., through Mrs. Noel Workman, assistant to the Director, Domestic Operations, Washington, D.C., American Red Cross: *Annual Report*, 1930-31, 1934-35, 1939-40, and 1940-41.

The American Russian Institute, San Francisco, current periodicals and pamphlets concerned with the U.S.S.R.

Mr. P. G. Anderson, of Evanston, Illinois, forty books and pamphlets including British and American publications issued during the World War, 1914-1918.

Mr. A. Hutton Ashkeny, of London, England, a letter dealing with plans for a postwar European and world organization.

Professor Thomas A. Bailey, of Stanford University, a collection of miscellaneous ephemeral materials.

- Mr. J. A. Balch, of Honolulu, his *Shall the Japanese Be Allowed to Dominate Hawaii?* Honolulu, 1942.
- Miss Suda L. Bane, of Stanford University, a song entitled "The Spirit of the U.S.A.," composed by Arthur L. Murray, winner of the United China Song Contest, sold for the benefit of the United China Drive sponsored by the Palo Alto Quota Club.
- Mr. C. B. Banfield, of Victoria, B.C., a file of British Columbia Department of Mines: *Bulletin*, Nos. 1-16 (1941-1942).
- The Honorable Bohus Beneš, Consul, Czechoslovak Consulate, San Francisco, a collection of literature on Czechoslovakia, and the present war.
- Mrs. Bertha Bengtson, of Stanford University, a collection of official camp papers of the present war.
- Professor Merrill K. Bennett, of Stanford University, books concerned with the World War, 1914-1918, and mimeographed materials on food in the present war.
- Mr. E. E. Black, of Honolulu, a set of Territorial Office Civilian Defense publications, including training charts and pictorials, manuals, pamphlets, handbooks, etc., on the present war.
- Mr. Robert E. Bolaffio, of New York City, three reprints by Gaetano Salvemini, on Italy and the present war.
- Mrs. Howard Haines Brinton, of Wallingford, Pennsylvania, a copy of *Quaker German*, edited by Hans Buchlinger, Pendle Hill, 1943. 124 pages, mimeographed.
- Mr. Frederick Brasch, of Washington, D.C., through Dr. Nathan van Patten, of Stanford University, collections of various current periodicals, publications of relief organizations in the United States, and miscellaneous United States government documents relating to the conduct of the war.
- Brown University Library, Providence, Rhode Island, materials on the outbreak of the World War, 1914-1918.
- Lieutenant Commander Stuart F. Bryant, of Palo Alto, books on the present war.
- Professor Chilton R. Bush, of Stanford University, contemporary publications issued in the United States.
- Mr. and Mrs. A. W. Carne, of San Francisco, through Chancellor Ray Lyman Wilbur, of Stanford University, a poster entitled "America Is at War," presented in memory of their son Donald Carne, the late United States Army Aviation Cadet, Stanford '42.
- Mr. William Cavalier, of San Francisco, a collection of medals of French rulers since the reign of Clovis.
- Mr. William L. Chenery, of New York City, through Dr. Perrin C. Galpin, New York City, a copy of the magazine *Victory*.
- Captain Jerzy Ciepielowski, of Windsor, Ontario, a bound volume of *Odsiecz Polska Walczaca* for 1941.
- Mrs. Ethel Clyde, of New York City, copies of *A System to Win This War—and the Peace to Come*, by Ely Culbertson, reprinted from *The Reader's Digest*, February 1943.

- Mr. F. H. Colombat, of Palo Alto, a copy of his *Commonwealth of Nations*.
- Miss Alice M. Colt, of Stamford, Connecticut, numbers of *The Lorraine Cross* and *The Kroonland*, published in France during the World War, 1914-1918, and *La Capponcina, An Epistle to Friends*, by Dr. Melville B. Anderson.
- Miss Margaret Cosgrave, of Fresno, a collection of materials issued by Japanese assembly and relocation centers.
- Dr. Karl Cowdery, of Stanford University, current numbers of *Heart Mountain Sentinel*, published at Cody, Wyoming.
- Mr. H. Wakelin Coxill, of Leopoldville, Belgian Congo, through Dr. Perrin C. Galpin, of New York City, a file of *Congo Mission News*.
- Professor Hardin Craig, of Stanford University, a collection of publications concerning the World War, 1914-1918.
- Mr. Luigi Criscuolo, of New York City, a file of *The Rubicon*, New York, for 1942.
- Miss Rosemary Cross, Co-ordinator, Stanford War Board, Stanford University, a collection of documents, bulletins, pamphlets, and posters on civilian defense in the present war.
- Miss Georgia F. Cutler, of San Francisco, a collection of materials and correspondence relating to Armenia.
- Mr. Paul Davis, of Stanford University, current files of periodicals issued in the United States and Great Britain.
- Mrs. H. L. Detrick, of Palo Alto, a collection of military manuals which were used by her husband, Captain H. L. Detrick, when a member of the corps of Engineers of the United States Army.
- Mrs. M. A. Dingman, of Berea, Kentucky, a file of the *Bulletin of the Peace and Disarmament Committee of the Women's International Organizations*, January 1933 to June 1939. Mimeographed.
- Mr. Martin Domke, of New Rochelle, a copy of *International Aspects of European Expropriation Measures*, New York, 1941.
- Mr. Milton A. Drescher, of Milwaukee, three National Socialist publications issued in Germany.
- Dr. Clyde Augustus Duniway, of Stanford University, a collection of miscellaneous current ephemeral materials.
- Dr. Bertha S. Dymont, of Stanford University, a revolver, gas mask, and five metal helmets of the World War, 1914-1918.
- Miss Ethel E. Emerson, of Stanford University, books dealing with the present war, and current files of women's journals issued by organizations in the United States.
- Miss Lisette Fast, of Stanford University, current publications of the American Friends Service Committee.
- Dr. Paul Fejos, Director, The Viking Fund, Inc., New York City, two statues, of the Yagau tribe of the Amazons, which were used as memorial figures of deceased clan members of the Wuisana sub-tribe.
- Professor H. H. Fisher, of Stanford University, books dealing with Japanese activities in China, and documents, books, serial publications, and mimeographed materials on the present war and on postwar planning.

- Food Research Institute, of Stanford University, photostat negatives of the *Frankfurter Zeitung*, June 23-30, 1943.
- Miss Elizabeth Fordyce, of Stanford University, recent pamphlets issued by industrial organizations in the United States on production in the present war.
- Mrs. C. S. Forester, of Berkeley, California, current files of three London newspapers.
- Mr. Fedore F. Foss, of Wheeling, W. Virginia, current numbers of *Russkiya Vedomosti*.
- Mr. C. Foster-Smith, of London, England, through Mrs. C. S. Forester, of Berkeley, a current file of the *Daily Sketch*, London.
- Dr. Harold T. L. Frasier, of Coalinga, California, a copy of his address before the American Legion, Coalinga Post No. 2, November 11, 1942, entitled "The Real Meaning of Armistice."
- Mr. T. St. John Gaffney, of Summit, New Jersey, continuations to the James A. Healy Collection on Irish History and to the German section of the Hoover Library, including files of the *American Monthly*, 1926-1927, 1931-1932, and *The Progressive Magazine*, 1925-1929.
- Dr. Perrin C. Galpin, of New York City, an extensive collection of documents, books, pamphlets, serial publications, and ephemeral materials on the present war and on contemporary international affairs and postwar planning, and additions to the Library's Belgian collection.
- Mrs. Olga Hess Gankin, of Menlo Park, California, current files of Russian newspapers.
- Mr. Vallejo Gantner, of San Francisco, a broadside, entitled "A Tribute to the Four Million Men in Arms who answering freedom's call comprised the first army in history that fought or were ready to fight solely for an idea—the spirit of liberty," issued by the Zellerbach Paper Company, San Francisco, in 1919.
- Colonel Charles S. Gaskill, of Philadelphia, a "Diary Relating to the Experiences of Doctor Durand and Colonel Gaskill during the Evacuation of Kieff by the Poles" [typewritten copy, 14 pages]; and copies of *The Mexican Herald*, published in Mexico City in 1913.
- The Honorable Leon Genis, Consul General of Belgium, San Francisco, copies of *Leopold First the Founder of Modern Belgium*, New York, 1929; and *Leopold of the Belgians (Leopold II), Founder of the Belgian Congo*.
- Mr. J. W. Getsinger, of Carmel, California, an album containing his personal memorabilia as a member of the United States Army of Occupation in Germany, 1918-1919.
- Mr. William H. Goede, of Palo Alto, the original commission of promotion of Colonel Arevalo of the Philippine revolutionary army, with autograph signature of the Secretary of War and stamp of the President and Commander-in-Chief, Emilio Aguinaldo, of the Revolutionary Government of the Philippines, taken at the capture of Imus, Cavite Province, Luzon, on June 19, 1899.
- Mrs. Edna Goede, of Palo Alto, a collection of United States Army handbooks and texts, issued during the period 1908 to 1918 (6 items).
- The Graduate School of Business, Stanford University, a file of *International Women's News*, London, May-September, 1941.

- Mrs. Malbone W. Graham, of Los Angeles, copies of her *Battle of the Airways*, September to December, 1942.
- Miss Janette A. Grant, of Stanford University, a copy of American Red Cross, Los Angeles Chapter, *Annual Report*, 1942.
- Mr. Paul Grosjean, of New York City, through Dr. Perrin C. Galpin, New York City, a copy of *He Who Laughs Last, Anecdotes from Norway's Home Front*, edited and published by Hans Olav and Tor Myklebost, Brooklyn, N.Y., 1943, and *World-Famous Paintings*, edited by Rockwell Kent, published at New York, 1939.
- Commander L. J. Gulliver, of Annapolis, Maryland, a copy of *School of the Sea*, by Leland P. Lovette.
- Mr. S. Halbert, of San Francisco, a copy of *Unser Amerika*, by Colin Ross, published in Leipzig, 1936.
- Professor Paul Hanna, of Stanford University, documents dealing with civilian defense in the present war.
- Mrs. Mary Hansen, of Palo Alto, three French Army documents bearing the name of François Kadinski, one dated December 10, 1863, conferring a medal for participation in a military expedition to Mexico, and two Army Discharge papers, dated September 6, 1864, and February 21, 1867, respectively.
- Professor Hazel D. Hansen, of Stanford University, *Juggernaut over Holland: The Dutch Minister's Personal Story of the Invasion of the Netherlands*, by E. N. van Kleffens, New York, 1941.
- General James G. Harbord, of New York City, a copy of his *The 40th Year March of Radio*. A Newcomen Address. Princeton, 1943.
- Major George D. Hart, of Camp Lee, Virginia, a collection of printed materials and memorabilia on the present war.
- Mr. Frederick R. Hazard, of Providence, Rhode Island, documents concerning civilian defense in the present war.
- Mr. James A. Healy, of New York City, extensive additions to the James A. Healy Collection on Irish History.
- Dr. Edward H. Heims, of San Francisco, a copy of a talk given by Walter Rathenau before a group of Berlin men.
- Professor Richard H. Heindel, of Philadelphia, a memorandum on the federal research problems in Congress and the 1943 appropriations.
- Dr. Paul Hohenau, O.I.P., of San Francisco, formerly Consul General of Peru in Vienna, a collection of periodicals on the present war, including a file of *Das Neue Tagebuch*, 1938-39, Amsterdam and Paris; and *Das Neue Europa*, 1929-1934, Vienna and Zurich, of which Dr. Hohenau was editor-in-chief.
- Mr. John S. Hollister, of Powellsville, Maryland, a file of *Patapsco Peacemaker*, September 15 to December 22, 1942.
- Dr. Carl L. Hubbs, of Ann Arbor, Michigan, letters from Douglas Cockerell to his brother at the University of Colorado, May 18 and July 26, 1942.
- Mr. and Mrs. De Witt Hutching, of Riverside, California, the St. Francis Medal from the Chapel of Mission Inn, known as the International Shrine for Aviators.

Institute of Pacific Relations, International Secretariat, New York City, through Chancellor Ray Lyman Wilbur, of Stanford University, a complete set of *Papers Presented to the Eighth Conference of the Institute of Pacific Relations, Mont Tremblant, Quebec, December 4-14, 1942.*

Mr. Harold J. Jonas, of New York City, a photostat of Hindenburg's historic proclamation to the army and the nation on September 8, 1918.

Mr. C. R. Jurgela, of Brooklyn, New York, a copy of Resolutions of the American Lithuanian Council of New York, 1942.

Mr. V. Kallistratov, Press Division, Embassy of the U.S.S.R., Washington, D.C., articles devoted to the anniversary of Maxim Gorky.

Major Eugene F. Kinkead, of South Orange, New Jersey, contributions to the James A. Healy Collection on Irish History.

Professor Paul Kirkpatrick, of Stanford University, a copy of *Mexico News*, July 15, 1943, published in Mexico City.

Mr. Julius Klein, of Washington, D.C., a collection of press releases concerned with the present war.

Mr. Dimitry Krassovsky, of Stanford University, a current file of the *San Francisco Examiner*.

Professor W. C. Langsam, of Schenectady, New York, a copy of his "United States and British Press Opinion of the Proposed Austro-German Customs Union of 1931."

Lieutenant Jack M. Laughlin, GHQ, APO 500, through Chancellor Ray Lyman Wilbur, of Stanford University, a photograph of General Douglas MacArthur with his full collection of medals, his famous hat, seated in his Wolsely sedan with his Chief of Staff, Major General Richard K. Sutherland. The photograph is autographed by the two generals.

Professor E. P. Lesley, of Stanford University, a copy of Hitler's speech of October 6, 1939, which Professor Lesley received from Dr. Ludwig Prandtl, the foremost German aerodynamicist.

Mrs. George E. Lewis, of Corona Del Mar, California, a copy of *Muskogee Times-Democrat*, for July 28, 1917.

Mrs. Florence H. Linder, of Weaverville, North Carolina, stamps of the Egyptian Expeditionary Force with surcharge of the Kingdom of the Hedjaz.

Mr. and Mrs. Alvin J. Lucas, of Palo Alto, eight posters issued in the United States on the present war.

Professor Ralph H. Lutz, of Stanford University, a collection of documents, books, pamphlets, newspapers, and serial publications dealing with the present war and postwar planning, and miscellaneous materials on contemporary history and politics.

Lieutenant Henry M. Madden, of New York City, a reprint of his article entitled *The Cholera in Post, 1831.*

Dr. William J. A. Maloney, of New York City, contributions to the James A. Healy Collection on Irish History.

Mr. C. L. McCarthy, of San Francisco, recording of the Forum Discussion of February 14, 1943, in the series "What's It All About?" over Radio Station KQW, San Jose.

- Dr. and Mrs. Frank M. McFarland, of Stanford University, British government documents and miscellaneous publications of various organizations issued during the World War, 1914-1918, and files of newspapers and serial publications issued in the United States, 1920-1924.
- Mrs. William McKay, of Honolulu, T.H., a collection of books on the World War, 1914-1918, gathered by Mr. William McKay, a file of *Honolulu Advertiser* covering the present war, and Mrs. McKay's personal Diary 1941. This material is being held in Honolulu until the end of the war.
- Mr. Harry L. McMasters, of Boulder, Colorado, ephemeral materials on the present war.
- Mr. George Hiram Mann, of New York City, his "America's Glorious Charter."
- Mrs. Emilie Markova, of Palo Alto, issues of *Free World*, November, 1941-June, 1943, and a copy of *Evropske Mensiny ve svych organisacich*, by Josef Chmelar, Prague, 1933.
- Mrs. J. M. Marsh, of Berkeley, California, a collection of posters, newspapers, clippings, and pamphlets concerned with the World War of 1914-1918, and a khaki banner, bearing the inscription "United for Democracy" with the six flags of the Allies grouped around the American shield. Hand embroidered, in colors.
- Mrs. E. G. Martin, of Stanford University, a heavy oak library table and a large round table.
- Mrs. Percy A. Martin, of Stanford University, an extensive collection of books, pamphlets, periodicals, and documents on political, economic, and social problems of twentieth-century Latin America to establish The Percy Alvin Martin Collection on Latin America in the Hoover Library in honor of her husband, the late Professor Percy Alvin Martin.
- Professor John Brown Mason, of Fresno, California, reprints of his articles dealing with government and politics.
- Chaplain J. W. Mathews, through Miss Louise Stockle, of Stanford University, *Third Battalion Bugle*, Volume I, Nos. 1-9 (December 21, 1942, to February 12, 1943), published by the Third Battalion, 125th Infantry, Page Mill Camp.
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- Mr. Sidney Wallach, of New York City, a copy of *Our Jewish Farmers*, by Gabriel Davidson, published at New York, 1943.
- Mr. Walter Herbert Warner, of San Francisco, through Mr. Ben S. Allen, of San Francisco, a "Summary Report, Civil Works Administration Activities, State of California, November 27, 1933—March 29, 1943," compiled and edited by David L. Bryant. Mimeographed, 141 pages.
- Professor James T. Watkins IV, of Columbus, Ohio, a collection of addresses by Senator Thomas to the Japanese and Chinese people; a reprint of an article by Professor Watkins entitled: "Democracy and International Organization—The Experience of the League of Nations"; and numbers of *The Paris Letter*, January 2 to May 27, 1940.
- Dr. Max Weinruch, of New York City, a copy of *The Transfer of Populations as a Means of Solving the Problem of Minorities*, by Mark Vishniak, published in New York, 1942.
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- Miss Margaret Windsor, of Stanford University, copies of *Above Suspicion*, by Helen MacInnes, and *A Toast to Tomorrow*, by Manning Coles.
- Misses Lottie and Maud Wood, of San Francisco, a portfolio of etchings entitled: *Pages of Glory and History, The 91st Division in Argonne and Flanders*, published by the "City of Paris," Paris, New York, San Francisco, with preface signed by Captain François de Tessen; and two books published in 1920 and 1921 on the aftermath of the World War of 1914-1918.
- Workmen's Compensation Board, Vancouver, B.C., through Mr. E. P. Archibald, Secretary, *The Workmen's Compensation Board Annual Report, 1917-1918, 1920, 1922-1941*.
- Mrs. M. P. Yarrow, of Newell, California, a collection of ephemeral materials concerned with the present war.
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Mr. Vance C. McCormick, of Harrisburg, Pennsylvania, through Professor Thomas A. Bailey, of Stanford University, "Policy and Achievement of the War Trade Board: A Report," by S. B. Conger, Foreign Adviser for the War Trade Board.

Dr. Edgar Rickard, of New York City, through Dr. Perrin C. Galpin, New York City, extensive additions to the Edgar Rickard Collection in the Herbert Hoover Archives.

Mr. Cyrus White, of Berkeley, California, a manuscript dealing with Mr. White's trip to Washington and the handling of the farm problem in 1917.

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Buck of the Month Fund, \$4,483.50	George E. Gamble Scholarship Endowment, \$8,458.50
Cap and Gown Scholarship, \$345.00	Gertrude M. Gardiner Scholarship, \$200.00
Chicago Stanford Club Scholarship, \$780.00	Elston Mills Harrison Memorial Scholarship, \$3,000.00
Class of 1924 Scholarship Fund, \$97.47	Hemet Union High School Valedictorian Scholarship, \$100.00
Class of 1925 Scholarship Fund, \$7.00	
Class of 1928 Scholarship Fund, \$19.50	
Robert Earl Collins, Dimes for Diplomas, \$158.50	

Jessie R. Kistler Loan Fund, \$300.00	Leland Stanford Junior Memorial Scholarship, \$400.72
Ivan W. Konlaieff Loan Fund, \$300.00	Stanford Women's Club of East Bay Scholarship, \$150.00
Lagunita Junior Class Scholarship, \$74.54	Stanford Women's Club of Los Angeles Scholarship, \$260.00
Lagunita Summer Club, \$456.39	Stanford Women's Club of San Francisco Scholarship, \$345.00
James F. Lanagan Memorial Scholarship, \$2,080.00	Ruth Lucie Stern Boy Scout Scholarship, \$1,144.00
Charles E. Merrill Scholarship, \$500.00	Ruth Stern Revolving Loan Fund, \$10.00
Dorothy Metz Scholarship Fund, \$340.18	Arthur B. Stewart Scholarship, \$1,000.00
Julian J. and Adele H. Meyer Loan Fund, \$1,000.00	Harriet McKeveatt Teague Scholarship, \$390.00
Henry Newell Estate Endowment Fund, \$2,493.58	Harry A. True Memorial Scholarship, \$390.00
Douglass E. Newton Scholarship, \$240.00	United States Government Student War Loan Fund, \$19,470.00
Panhellenic Alumnae Association of San Francisco Bay District Scholarship, \$200.00	Stanley Wilson Vanderburgh Memorial Scholarship, \$750.00
John Pressley Phillips, Jr., Memorial Scholarship, \$843.50	Helen Bennett Voorhees Memorial Scholarship, \$3,000.00
Roble Club Scholarship, \$429.00	Ray Lyman Wilbur Fund, \$4,250.00
Senior Class Scholarship Fund, \$1,403.43	Jacob and Mary S. Yost Memorial Scholarship, \$345.00
Rose Wilson Shoup Memorial Scholarship, \$130.00	

from the following donors:

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The American Legion	Everett G. Bailie	Everett J. Brown
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Hammond Ashley	Mrs. John Bakewell, Jr.	Mrs. Harry Buck
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Associated Students, Stanford University	J. L. Barneson	Robert R. Buss
Mrs. Blanche Rawdon	Frances Barney	Georgia Elizabeth Butterway
Astredo	Marian G. Beardsley	O. Byler
George H. Atkinson	R. E. Beckley	Daniel M. Campbell
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Harold M. Bacon	Frank W. Bireley	Mrs. Madeleine S. Charters
<i>In memory of</i>	Gale Blosser	Chicago Stanford Club
<i>Ensign Louis M. Love</i>	Board of Athletic Control	Leroy Childs
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 Catherine Meyer Schott
 Philip J. Schultz
 Norman B. Scofield
 Mrs. Norman B. Scofield
 Fred F. Scribner
 Senior Class of 1940
 Senior Class of 1941
 Senior Class of 1942
 Ryo Shibuya
In memory of
Mrs. Tora Shibuya

Frank H. Shlaudeman	Barton A. Stebbins	Mrs. W. H. Tucker
Phil W. Shumaker	Mrs. Louis Stern	Frederic N. Tyroler
Robert Sibley	Ruth Lucie Stern	Edward R. Valentine
J. Hackett Sickler	Arthur B. Stewart	Wm. Van De Carr
Sigma Delta Pi	Maude Stinson	Dr. C. M. Vanderburgh
Mary Fisk Simpson	John B. Stone	Mrs. C. M. Vanderburgh
Leon Sloss, Jr.	Dr. Thomas A. Storey	Willard R. Voorhees
Louis Sloss	Mrs. Thomas A. Storey	Mrs. Willard R. Voorhees
Mrs. Louis Sloss	Captain Homer P. Struble	Frank F. Walker
Richard L. Sloss	Mrs. Homer P. Struble	Kenneth R. Walker
Fred H. Smith	John A. Sutro	Ida Wehner
Dr. William F. Snow	Robert E. Swain	F. L. Wilde
Cora Stager	Mrs. Robert E. Swain	Elizabeth Moody Williams
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Association	Mrs. James B. Swickard	Rhona Williams
Stanford Bookstore	Clara Taber	Dr. T. M. Williams
Jane L. Stanford Trust	Mrs. Minnette P. Taylor	Mrs. T. M. Williams
Leland Stanford, Jr.,	Harriet M. Teague	George H. Wilson
Scholarship Trust Fund	T. H. A. Tiedemann	The Women's Athletic
Stanford Women's Club	Mrs. Andrew Gray Tod	Association
of East Bay	Roland E. Tognazzini	Women's Council
Stanford Women's Club	Treasurer of the United	Carleton B. Wood
of Los Angeles	States	James M. Wood, Jr.
Stanford Women's Club	Payson J. Treat	Edith P. Wright
of San Francisco	Mrs. Payson J. Treat	Oliver B. Wyman
Dr. Leo L. Stanley	Helen E. True	Frank M. Yost
Mrs. Leo L. Stanley	W. H. Tucker	Mary Yost
Noel H. Stearn		

SCHOOL OF SOCIAL SCIENCES

Gifts have been received for :

School of Social Sciences, \$104.96	History Department, \$38.25
School of Social Sciences, Pension Fund, \$400.00	Institute of American History, \$10,550.00
Department of Economics, \$60.00	Melville Jacoby Fellowship Fund, \$3,562.25
Division of Journalism, \$18.00	Rockefeller Foundation for the Food Research Institute, \$15,000.00
Department of Political Science, \$17.00	Rockefeller Foundation for Political Science Department, \$1,250.00
David L. Farnsworth Endowment, \$3,247.56	Study of Public Relations, and salary of an Associate Professor, \$7,500.00
Finnish Relief Fund, Political Science Department, \$1,000.00	James Birdsall Weter Memorial Scholarship Fund, History, \$3,500.00
Food Research Institute, salary fund, \$600.00	

from the following donors :

Anonymous donors	Mrs. Samuel Bloom	Marguerite D. Boardman
Mrs. Allan Austin	<i>In memory of</i>	Dr. Benjamin Bock
Charles A. Barker	<i>William Haas</i>	Samuel W. Burtchael

Chilton R. Bush	Mrs. Annalee W. Jacoby	H. Russell Paine
Edith A. Cohn	Eliot Jones	Thoreau Raymond
W. W. Crocker	Mrs. Eliot Jones	The Rockefeller
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Ruth E. Drane	J. L. Kline	David L. Rodgers
Margot Eisenberg	Frances Lengfeld	Lotta P. Rossier,
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Finnish Relief Fund, Inc.	Joseph L. Lewinson	Ester L. Sale
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The department and other reports follow.

Respectfully submitted,

RAY LYMAN WILBUR, *Chancellor*

APPENDIXES

APPENDIX I. REPORT OF THE FINANCIAL VICE-PRESIDENT

APPENDIX II. DEPARTMENTAL REPORTS

APPENDIX III. COMMITTEE REPORTS

APPENDIX IV. ADMINISTRATIVE REPORTS

APPENDIX V. PUBLICATIONS OF THE FACULTY

APPENDIX I

REPORT OF THE FINANCIAL VICE-PRESIDENT

TO THE HONORABLE BOARD OF TRUSTEES

Gentlemen:

I desire to submit an accounting of the financial and business operations of Stanford University for the fiscal year ended August 31, 1943. In presenting this report I express regret that its completion has been delayed by circumstances beyond the control of the University authorities.

In preparing the reports for the fiscal years 1940-41 and 1941-42 it was found possible in the interest of brevity to eliminate certain exhibits previously included. While this report includes certain data of possible limited interest it is believed that any further condensation at this time would necessitate omitting facts of important record value. The condensed summary of income and expense has been rearranged and simplified in order to make it more easily understood by those not accustomed to reading University financial statistics. A complete statement of income and expense is submitted for the benefit of those desiring full facts. The balance sheet presentation follows the form adopted two years ago.

The most significant financial and physical activity of the year was the rearrangement of the University's plant and facilities to accommodate the extensive soldier-training program assigned by the War Department. This involved a complete conversion of all of the housing and dining facilities for men to accommodate a designated training strength of approximately three thousand soldiers; and adjustment of the business and financial affairs of the University to reflect the program.

While this conversion involved difficulties, it is possible to report that the transition was made with efficiency and without any serious adverse long-term impact on the financial and business affairs of the institution.

Without the fine co-operation of the operating staff this rearrangement would have been most difficult. Numerous members of the business and operating departments gladly contributed many hours of overtime work to the University's training assignment,

and I desire to thank the entire personnel and, in particular, wish to commend Mr. Ernest Erwin, Assistant Business Manager; Mr. Stanley Sharp, Director of Men's Residences; Mr. J. W. McDonnell, Superintendent of Buildings and Grounds; and Mr. Lee Yancey, Chief Accountant, for their efficient, cordial assistance.

The University entered into several contracts with various branches of the government covering the training and research assignments, chiefly as follows:

- a) War Department, covering the Army Specialized Training Unit and the Army Specialized Training Assignment and Reclassification Unit.
- b) War Department, covering the Civil Affairs Training School.
- c) War Department, covering the WAC Physical Therapy Training Unit.
- d) War Department, covering the training of Army medical students.
- e) Navy Department, covering the training of naval medical students.
- f) United States Office of Education, covering the ESMWT program.
- g) Civil Aeronautics Administration, National Advisory Committee for Aeronautics, National Bureau of Standards, Office of Strategic Services, Office of Scientific Research and Development, Rubber Reserve Company, and others, covering various research activities identified with the war.

All of the contracts are based on a broad assumption that the work will be done at cost and that the University will neither lose nor profit by the arrangement.

The principal contracts are subject to compensation adjustments from time to time and to renegotiation both before and after audit. This condition indicates a possibility that renegotiation may change the initial compensation received for the training and research work.

BALANCE SHEET

ASSETS

Total assets increased \$1,582,824.

Following is a summary of the principal changes in the assets.

General Division assets increased by \$908,564.98, of which

sum \$770,323.00 represents an increase in cash and receivables due primarily to the large volume of operations made necessary by the Army training program.

Investment of reserves and other funds in this section increased \$145,665.76.

Loan Division assets.—Tuition Note collections for the year were in excess of notes issued in the amount of \$98,220.52. An increase in available cash loans for students from gifts and interest totaled \$34,765.37.

Endowment Division assets increased \$765,280.46 due mainly to the generosity of the friends of the University and capital gains resulting from the sale of investment assets.

LIABILITIES

Reflecting the increased volume of transactions in the University's dining halls and dormitories as a result of the Army training program, General Division liabilities increased by \$908,565.00.

Following are the principal changes in the liabilities:

Accounts and Loans Payable increased.....	\$601,708.00
Deferred Credits increased	25,461.00
Reserves for Replacements increased.....	34,003.00
Other Reserves increased	103,692.00
Unappropriated Gift Income increased.....	101,693.00
Surplus in Departments increased.....	47,126.00

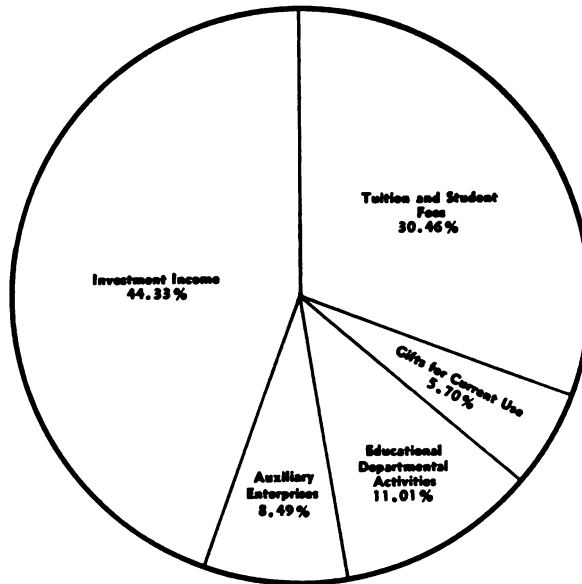
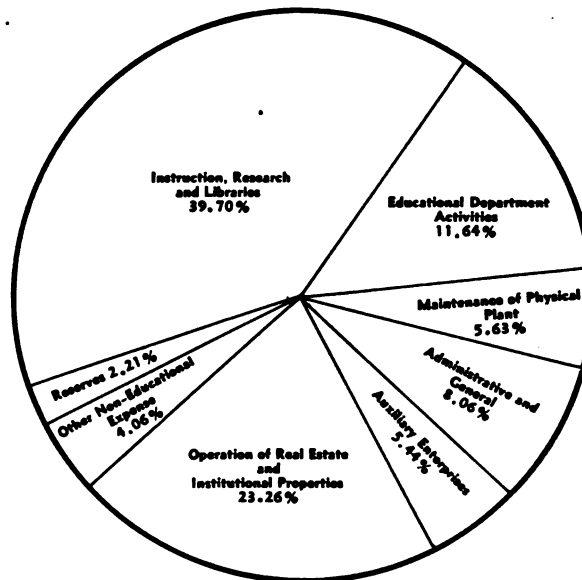
INCOME AND EXPENSE

For the third successive war year the University was able to overcome an indicated operating deficit and to balance its budget.

The principal points of note are (a) reduction in income from tuition and fees of \$217,885.44, (b) savings in operations of \$305,090.32 and an increase in investment and other income of \$198,002.02.

A summary of operations is presented on page 94; a detailed statement on pages 96-100, and a graphic illustration of income and expense on page 80.

Although the operations for the year substantially bettered the budget expectations, it is necessary again to note the steady rise in costs. Until the nation's financial affairs are more stabilized it is impossible to conclude that operating costs have reached maximum levels.

STANFORD DOLLAR 1942-43**GROSS INCOME DOLLAR****GROSS EXPENSE DOLLAR**

ENDOWMENT INVESTMENTS

The following tabulation, in summary form, sets forth the book value of the different classifications of investments held at the close of the fiscal year.

Description	Book Value	Percentage of Total
Bonds		
Government bonds	\$ 6,952,423.00	22.52
Corporate bonds	7,556,418.92	24.47
Preferred stocks	2,102,460.78	6.81
Common stocks	6,311,656.81	20.44
Real Estate	2,521,635.39	8.17
Real Estate Loans and Contracts.....	1,450,991.80	4.70
Income-producing units of Educational Plant	2,204,218.81	7.14
Miscellaneous Loans	648,236.32	2.10
Funds with Other Trustees and Miscellaneous Investments	1,128,381.12	3.65
	\$30,876,422.95	100.00
Less: Investment in other divisions..	353,562.95	
Total Endowment Division investment	\$30,522,860.00	

The average rate of return realized from the entire Endowment Division during the past year was 4 per cent.

The average rate of return on the various classes of assets was as follows :

Securities	4.24 per cent
Real Estate	2.41 per cent
Mortgages and Contracts.....	4.25 per cent

In further support of the war effort the University increased its holdings of Government bonds by \$2,105,602.15. At the close of the year the University held \$6,952,423.00 par value of Government bonds, with an indicated market value of \$7,071,309.00. During the past three years the University has increased its holdings of Government securities by \$3,506,910.00, and this classification of investments now represents 30.8 per cent of the book value of the total merged security portfolio.

The Investment Committee continued to be guided by a general

policy which contemplates investment of the stock and bond portfolio in certain proportion between securities of various classifications. At the close of the fiscal year the security investment program was as follows, expressed in terms of market values.

Bonds of prime quality.....	40	per cent
Bonds of intermediate quality.....	17½	per cent
Dividend-paying preferred stocks.....	7½	per cent
Dividend-paying common stocks	35	per cent

The book value of prime-quality bonds was increased by \$2,155,828.00. Although the book value of common-stock investments was reduced \$1,123,057.00 the market value of this section of the portfolio substantially exceeded the market value at the close of the preceding fiscal year. The book value of preferred-stock investments was reduced by \$395,999.00, while the temporarily uninvested endowment cash increased \$612,257.00.

The trend of the University's stock and bond portfolio toward greater investment in prime-quality bonds and short-term securities has occasioned some reduction in the over-all indicated yield. It is believed that when the temporarily uninvested endowment cash is reinvested and certain short-term bonds are shifted to longer maturity securities the aggregate income will be restored.

The principal changes in the real estate section were the acquisition of the commercial property at the corner of South First and San Carlos streets in San Jose; and the sale of the 31,539-acre Vina Ranch in Tehama County.

PLANT

The book value of land, buildings, and equipment, including the amount invested in income-producing institutional units, totaled \$19,325,862.32. This is an increase of \$130,576.27 during the year, due principally to the purchase of \$43,664.09 of library books and \$75,320.56 increase in value of campus dwellings.

It was increasingly difficult to obtain materials and operating personnel during the year and as a result many needed improvements were postponed. Aside from certain extensions of facilities required by the Army training program, no major alterations were made to University structures. The Army training program, however, necessitated extensive changes in Encina Dining Commons and complete re-equipping and re-commissioning of Branner Dining Hall. Encina Dining Commons was converted to cafeteria style

of service and the capacity increased from approximately 500 to 2,500 servings per meal. Construction was started on Branner Dining Hall, the plans contemplating preparation of this structure to serve 800 trainees per meal, cafeteria style. The structure had not been in use as a dining hall for many years.

The use by the Army of the four major dormitories for men necessitated extensive additions and alterations to the plumbing facilities, the installation of double-deck beds, and various other improvements.

The difficulties in connection with materials and personnel also curtailed work on roads and grounds. The chief activity in this direction was the start of improvements to the oval roadway in front of the Quadrangle.

ENGINEERING ADVISORY COMMITTEE

The Engineering Advisory Committee, under the chairmanship of Dean Samuel B. Morris of the School of Engineering, continued to render important help to the administration. This committee was formed two years ago in order to mobilize the abilities of the faculty to provide consulting advice and assistance in long-range planning, as distinguished from day-to-day administrative activities. It is hard to overstate the value of the advisory service rendered by this committee, which functions on a volunteer basis. The committee consists of the following: Professor Leland H. Brown, illumination and electrical engineering; Professor Milton L. Wiedmann, heating, ventilating, and mechanical engineering; Professor Leon B. Reynolds, water supply, sanitation, and flood control; Professor E. C. Thomas, streets, drainage, and city planning; Professor J. B. Wells, building, structures, and foundations; Dean Samuel B. Morris, chairman.

DINING HALLS AND DORMITORIES

The need for rearranging the men's dining halls and dormitory services imposed a substantial burden on Mr. Stanley Sharp, Director of Men's Dormitories. In addition to performing his customary functions, Mr. Sharp acted as co-ordinator of all Army housing and messing facilities and discharged these added responsibilities with great tact and efficiency.

With the use of the four men's dormitories by the Army it became necessary to find other facilities for the civilian men students.

Through the co-operation of the Alumni Inter-Fraternity Conference all of the fraternity houses were made available to the University. The fraternity houses were renamed and their operation assumed by the University's operating staff. The agreement, which extends only for the duration of the conflict, is an excellent example of co-operation, and I desire to compliment the fraternities for their assistance in effecting this reorganization of facilities.

Miss Christine Ricker continued to supervise dining accommodations for civilian men and women students. Dining accommodations were available for civilian men students in the Stanford Union during the summer quarter and the plans contemplated the operation of six dining halls in designated fraternity houses with the opening of the autumn quarter. No changes were made in the dining accommodations for women.

The women's dormitories were fully occupied during the autumn, winter, and spring quarters. The unusually heavy enrolment in the summer necessitated use of both Lagunita Court and Robb Hall. Miss Anastasia Doyle, Director of Women's Residence, and her assistant directors were confronted throughout the year with unusual operating problems as a result of personnel and commodity shortages, but succeeded, nonetheless, in providing excellent accommodations for the women students.

STANFORD UNIVERSITY PRESS

The wartime changes in the educational field had their effect on the University Press. The publishing department issued 24 titles during the year, the same as for the previous year, but the 1943 total included more outline maps and smaller publications. Volume of sales in both the publishing and manufacturing departments were down approximately 6 per cent, but the final financial results of the year's operations showed an improvement.

WILLS AND BEQUESTS

The University continued to receive invaluable assistance from many of its loyal alumni and friends in the effort to increase its endowment and working funds. The Stanford Fund "Special Gifts" Committee under the co-chairmanship of Mr. Morgan A. Gunst and Mr. L. H. Roseberry were particularly effective in coordinating and developing interest in the University's problems.

Evidence of the effectiveness of these loyal friends is to be

found in the funds received from estates and trusts which were distributed during the year and the recording of wills in which the University is mentioned.

Partial or complete distribution of assets was effected in connection with the following estates :

Estate of Alice Urquhart Derby
 Estate of Charles N. Felton, Jr.
 Estate of Mary Virginia Ford
 Estate of Howard Judson Hall, funds
 subject to Living Trust
 Estate of Joseph Horton Kile
 Estate of Lydia Lucille Meyer
 Estate of Henry Newell
 Estate of Lawrence Newman
 Estate of Lotta P. Rossier

The University received notice of inclusion in the following estates :

Estate of Edwin Call Brown, deceased
 Estate of Margaret J. Burnside, deceased
 Estate of James W. Coffroth, deceased
 Mrs. Frances Coffin Edwards (not deceased)
 Estate of Frederick Herbert Gates, deceased
 Estate of Jake Gimbel, deceased
 Estate of Amy R. Goldsmith, deceased
 Estate of William Haas, deceased
 *Estate of Joseph R. Hamilton, deceased
 Estate of Charles C. Head, deceased
 *Estate of Zerah Yates Howard, deceased
 Estate of Lillie J. Martin, deceased
 Estate of Walter Samson, deceased
 Estate of Louis Schatz, deceased
 Estate of Walter G. Schulte, deceased
 Estate of Charles Shattinger, deceased
 *Estate of John R. Van Pelt, deceased

* Bequest to University failed.

OTHER ACTIVITIES

The financial operations of the Board of Athletic Control and the Stanford Union are not reported in the University accounts, and therefore a summary of their operations is presented below. Detailed financial reports of these organizations are printed in the *Report of the Students' Organizations Fund*.

LYBRAND, ROSS BROS. & MONTGOMERY
2 PINE STREET, SAN FRANCISCO

*To the Board of Trustees
Leland Stanford Junior University
Stanford University, California*

We have examined the balance sheet of Stanford University as at August 31, 1943, and the related condensed statements of income and expenditures, and of departmental balances for the fiscal year then ended. In connection therewith we have reviewed the system of internal control and the accounting procedures of the University and, without making a detailed audit of the transactions, have examined or tested accounting records and other supporting evidence, by methods and to the extent we deemed appropriate. We received confirmation from the depositary with respect to all bonds and corporate stocks recorded as owned or held by the University at August 31, 1943, and we made substantial tests of the changes in investments and of the related income receivable during the fiscal year then ended.

In our opinion, the accompanying balance sheet and related condensed statements of income and expenditures, and of departmental balances fairly present the position of Stanford University at August 31, 1943, and the results of its operations for the fiscal year.

LYBRAND, ROSS BROS. & MONTGOMERY

SAN FRANCISCO, CALIFORNIA
January 15, 1944

		ST.
		BALANCE
ASSETS		
General Division		
Cash on Hand and Demand Deposits		\$ 45
Receivables, less Allowance for Losses		
United States Government	\$ 629,652.41	
Other Accounts and Notes	256,245.56	
Accrued Interest	143,643.33	1,02
Inventories		34
Deferred Charges		
Unexpired Insurance Premiums	\$ 57,576.46	
Other	28,189.96	8
Investment of Pension, Hospital, and Insurance Funds		
Real Estate	\$ 54,206.72	
Bonds and Corporate Stocks	237,698.17	25
Loan to Endowment Division		16
		<u>\$ 2,36</u>
Loan Division		
Tuition Notes Receivable		\$ 55
Student Loans Receivable		11
Cash Available for Student Loans		5
		<u>\$ 76</u>
Endowment Division		
Demand Deposits		\$ 67
Bonds (Approximate Market Quotations \$15,090,000)	\$14,508,841.92	
Corporate Stocks (Approximate Market Quotations \$9,440,000)	8,414,117.59	
	\$22,922,959.51	
Less Other Division Investments		
General Division	\$237,698.17	
Agency Division	115,864.78	353,562.95
		<u>\$22,56</u>
Realty Loans and Contracts Receivable		1,45
Other Loans		25
Funds in Trust with Other Trustees		1,15
Real Estate and Improvements		2,55
Income-Producing Institutional Property		2,20
Building Fund Loan		41
		<u>\$31,11</u>
Plant Division		
Land, Buildings, and Equipment		\$19,35
Less Other Division Investments		
General Division Investment in Real Estate	\$ 54,206.72	
Endowment Division Investment in Income- Producing Institutional Property	2,204,218.81	2,25
		<u>\$17,04</u>
Agency Division		
Specific Investments:		
Bonds	\$ 107,217.45	
Corporate Stocks	47,416.19	\$ 15
Securities Invested with Endowment Division		15
		<u>\$ 25</u>
		<u>\$51,65</u>
Elimination of Interdivisional Accounts		55
		<u>\$51,00</u>

UNIVERSITY**AUGUST 31, 1943****LIABILITIES AND FUNDS****General Division**

Accounts and Payrolls Payable	\$ 768,180.09
Deposits	44,999.42
Deferred Credits	104,583.89
Pension, Hospital, and Insurance Funds	291,904.89
Reserves for Renewals and Replacements	119,476.04
Other Reserves	158,711.00
Unappropriated Gift and Endowment Income	701,039.05
Departmental Balances, Details Annexed (page 95)	173,165.14

\$ 2,362,059.52**Loan Division**

Reserve for Tuition Notes Receivable	\$ 552,994.20
Funds Contributed for Student Loans	208,086.44

\$ 761,080.64**Endowment Division**

Endowments	
Unrestricted	\$21,791,730.46
Restricted for Specific Purposes	7,219,796.04
Restricted Subject to Living Trust Agreements	333,509.91
Restricted Subject to Annuities	37,351.82
Restricted in Trust with Other Trustees	1,128,381.12
	<u>\$30,510,769.35</u>

Accumulated Capital Gains, Net of Losses, from Sale and Liquidation of Unrestricted Investments Assets	397,146.38
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\$30,907,915.73

Funds Temporarily Functioning as Endowments	125,718.27
Loan from General Division	161,483.95

\$31,195,117.95**Plant Division**

Gifts of Plant	\$ 8,714,811.42
General Division Expenditures	7,938,496.41
Endowment Funds Borrowed, Expended on Educational Plant	414,128.96

\$17,067,436.79**Agency Division**

Liability for Funds Held in Custody for Others	\$ 270,498.42
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\$ 270,498.42**\$51,656,193.32****Elimination of Interdivisional Accounts****575,612.91****\$51,080,580.41**

REPORT OF THE FINANCIAL VICE-PRESIDENT

**CONDENSED STATEMENT OF CURRENT INCOME AND EXPENDITURES
FOR THE YEAR ENDED AUGUST 31, 1943**

INCOME (see Note 1)

Educational and General		\$1,919,977
Endowment Investment	\$2,868,006.62	
Less Income Appropriated to Funds	74,033.60	2,793,973
Contributions Used for Current Purposes		359,222
Sales and Activities of Instructional Departments		693,638
Auxiliary Enterprises and Other		535,313
Gross Income		<u>\$6,302,125</u>

EXPENDITURES (see Note 1)

Administration and General Expense	\$ 500,748
Instruction, Research, and Libraries	2,467,315
Operation and Maintenance of Physical Plant	350,113
Educational Department Activities	723,650
Auxiliary Enterprises	338,082
Operating Expense of Real Estate and Income-Producing Institutional Properties	1,445,916
Other Noneducational Expenses	252,430
Amortization and Reserves (see Note 2)	137,337
Gross Expenditures	<u>\$6,215,595</u>
Income in Excess of Expenditures Transferred to Departmental Balances (see page 95)	<u>\$ 86,530</u>

NOTE 1

Income and expenditures do not include receipts from governmental agencies and related expenditure connection with special research contracts.

NOTE 2

Includes special provision of \$78,126.91 for depreciation at 1 per cent of average balances of the endowment division's investments in certain income-producing institutional property. The provision was allocated in part to amortization of investment and in part to special reserves for rehabilitation and renewals of various properties, including educational plant. In addition to this special provision, expenditures include depreciation provision of \$12,960.94 on endowment division investments in the income-producing institutional property covered by the above-mentioned special provision, all of which was applied as amortization of investment. With the exception of minor special provisions, no depreciation was provided for depreciable property included in the endowment division's investments in real estate and improvements. In conformity with general accounting practices of educational institutions, no depreciation was provided for property, principally educational plant, carried in the plant division.

**STATEMENT OF DEPARTMENTAL BALANCES
FOR THE YEAR ENDED AUGUST 31, 1943**

Departmental Balances, September 1, 1942	\$126,039.12
Excess of Income over Expenditures (see page 94)	86,530.23
	\$212,569.35
Less Appropriation to Reserve for Plant Improvements	39,404.21
Balance, August 31, 1943, composed as follows:	
Unexpended Departmental Appropriations	\$110,981.29
Restricted Funds, Balances Available for Future Use	48,874.22
Unappropriated	13,309.63
Total	<u>\$173,165.14</u>

ANALYSIS OF INCOME FOR YEAR ENDED AUGUST 31, 1943

Educational and General

Tuition			
General	\$1,231,069.71		
Tuition Notes Paid Subsequent to Year Issued	114,159.87		
Interest on Tuition Notes	21,105.19		
Graduate School of Business	26,481.50		
Campus Medical	32,485.00		
Medical School, San Francisco	87,306.76		
School of Nursing	11,700.75		
Hopkins Marine Station	1,495.00	\$1,525,803.78	
Other Income			
Incidental	\$ 99,223.00		
Encina Gymnasium	41,858.20		
Cash Payment by B.A.C. to Meet Salaries	50,712.00		
Student Health	45,242.20		
Roble Gymnasium	20,735.25		
University Libraries	39,212.75		
Lane Library	1,430.00		
Summer Geology	895.00		
Polo	—10.00		
Registrar	9,301.86		
Appointment Secretary	2,138.26		
Applications	12,403.20		
Aptitude Test	8,802.45		
Nurses' Home Rentals and Services	62,229.50	\$ 394,173.67	\$1,919.9
Endowment Investments			
Merged Unrestricted			
Interest on Bonds	\$ 446,368.19		
Interest on Mortgage Loans	55,337.59		
Interest on Contracts of Sale	6,344.64		
Interest on Other Loans	15,572.87		
Dividends on Corporate Stock	485,510.83	\$1,009,134.12	
Separate Investment of General Funds			
Rentals on Real Estate, City	\$ 7,298.89		
Rentals on Real Estate, Country	57,082.93	64,381.82	
Income-Producing Institutional Property			
Stanford Hospital	\$ 643,224.88		
Dormitories and Dining Halls	1,027,174.30		
Garages, Roble	616.85		
Campus Dwellings	8,666.82		
Real Estate, Pacific Grove	900.00		
Water System	12,919.13		
Subdivision	18,175.47	1,711,677.45	
Separately Invested			
Interest on Bonds	\$ 17,795.74		
Dividends on Corporate Stock	22,916.55		
Rentals on Real Estate, City	40,967.37		
Rentals on Real Estate, Country	1,076.08		
Interest on Mortgage Loans	45.00		
Interest on Other Loans	12.49	82,813.23	2,868.0
Carried forward			\$4,787.9

ANALYSIS OF INCOME—Concluded

Brought forward		\$4,787,984.07
Contributions for Current Purposes		359,222.14
Sales and Services of Educational Departments		
Chemistry Breakage	\$ 8,623.49	
Food Research Publications	3,364.96	
Graduate School of Business Publications	5,851.96	
Demonstration Class	945.00	
Dramatists' Alliance	120.02	
Industrial Relations Conference	4.12	
Idobismitol Royalties	4,192.28	
Sobisminol Royalties	2,453.10	
Ryan Laboratory	379.83	
Mechanical Engineering	529.90	
Speech and Drama	11,975.00	
Speakers' Bureau	44.21	
Thoracic Surgery	2,595.00	
Radio Institute	5,674.00	
Guggenheim Laboratory Services	6,770.80	
Committee on College Problems in Relation to		
National Defense	1,341.52	
Klystron Royalties	2,218.39	
Stanford Associates, Stanford Fund	1,443.83	58,527.41
Other Sources		
Discounts on Purchases	\$ 5,948.45	
Financial Vice-President's Fines	1.00	
Traffic Violation Fines	366.50	
Filling Station Rental	2,700.00	
Women's Gymnasium Rental	425.00	
Museum	663.50	
Miscellaneous	66,532.80	
Concessions	1,956.16	
Miscellaneous: Auditorium and Classroom Rental	611.69	79,205.10
Sales and Services of Organized Activities Relating to Instructional Departments		
Lane Hospital	\$333,860.74	
Stanford Clinics	109,955.95	
Dramatic Productions	5,364.91	
Engineering, Science, and Management War Training	185,929.81	635,111.41
Sales of Auxiliary Enterprises and Activities		
Nursery	\$ 4,252.73	
Steam	20,766.22	
University Press	280,514.80	
Guide Service	1,154.59	
Student Hospital Fund	22,887.85	
Student Army Stores	40,716.93	
Men's Residences, Fraternity Group	13,445.17	383,738.29
Other Noneducational Income		
Gift Scholarships	\$ 42,712.69	
Gift Fellowships	28,254.40	70,967.09
Gross Income, All Sources before Appropriations to Funds		\$8,374,755.51

ANALYSIS OF EXPENDITURES FOR YEAR ENDED AUGUST 31, 1943**General Administrative Offices Expense**

President's Office	\$ 44,700.39	
Chancellor's Office	4.87	
Treasurer's Office	16,836.89	
Financial Vice-President's Office	121,160.38	
Registrar's Office	78,396.16	
Dean of Men's Office	11,164.11	
Dean of Women's Office	10,632.15	
Director of Summer Quarter	1,509.74	
Public Exercises Committee	7,013.06	
Academic Secretary	78.30	
Publications Committee	765.55	\$ 292,261.60

General Expense

Retiring Allowances	\$187,001.72	
Group Insurance	6,091.95	
Health Insurance	8.70	
Auditing	3,150.00	
Taxes, Educational Plant	4,912.91	
Furniture Fund	5,350.90	
Interest	11.11	
General Expense	1,959.84	208,487.13 \$ 500,744

Instruction and Departmental Research

School of Medicine	\$ 338,964.40	
School of Law	63,224.72	
Graduate School of Business	77,417.88	
School of Education	65,730.28	
School of Engineering	170,019.24	
School of Biology	228,856.28	
School of Letters	160,826.54	
School of Social Sciences	228,409.35	
School of Physical Sciences	190,576.74	
School of Fine Arts	63,123.15	
School of Physical Education	168,511.97	
Nonbudget Expenditures from Sales and Fees	49,794.33	
Expenditures Not Directly Allocated to Schools	124,562.24	
	\$1,930,017.12	
Less Capital Expenditures	3,124.53	1,926,89

Organized Research

Research Committee	\$ 1,352.62	
Food Research Institute	47,914.29	
Departmental Research, Special Contributions	307,078.72	
Independent Study	8,656.03	
Endowment Funds Used for Specific Research	23,196.98	
	\$ 388,198.64	
Less Capital Expenditures	73.08	388,12
Carried forward		\$2,815,76

ANALYSIS OF EXPENDITURES—Continued

Brought forward			\$2,815,766.88
Libraries, Museum, and Church			
Libraries	\$	176,153.88	
Museum		6,999.89	
Memorial Church		12,011.73	
	\$	195,165.50	
Less Capital Expenditures		42,868.29	152,297.21
Operation and Maintenance of Physical Plant			
Repairs and Alterations	\$	57,725.77	
Maintenance of Grounds		67,400.69	
Janitors		50,320.20	
Fire Department		16,466.85	
Electric Lighting System		2,836.17	
Police Department		15,019.67	
Heating		58,008.89	
Water, Hopkins Marine Station		138.48	
Lighting, Hopkins Marine Station		739.86	
Sewerage System, Rental		3,321.43	
Corporation Yard		17,447.47	
Stores Keeping		8,979.28	
Fire, Earthquake, and Liability Insurance		23,841.50	
Light, Undistributed		20,244.23	
Telephone and Telegraph, Undistributed		7,623.14	350,113.63
Organized Activities Relating to Instructional Department			
Lane Hospital	\$	400,450.44	
Stanford Clinics		137,270.18	
Engineering, Science, and Management War Training		185,929.81	723,650.43
Auxiliary Enterprises			
Men's Residences, Fraternity Groups	\$	13,445.17	
University Press		262,201.89	
Guide Service		1,964.76	
Mimeograph and Stenographic Bureau (Net)		—379.16	
Photostat Department (Net)		—170.49	
Student Hospital Fund		22,887.85	
Student Stores		38,132.60	338,082.62
Investment Enterprises			
Real Estate	\$	45,713.60	
Income-Producing Institutional Property			
Stanford Hospital	\$	543,591.39	
Dormitories and Dining Halls		827,038.32	
Garages, Roble		257.27	
Campus Dwellings		5,280.27	
Real Estate, Pacific Grove		250.96	
Water System		12,272.01	
Subdivision		11,512.57	1,400,202.79
			1,445,916.39
Carried forward			\$5,826,827.16

ANALYSIS OF EXPENDITURES—Concluded

Brought forward			\$5,826,827.16
Other Noneducational Expense			
Scholarships			
Grants in Aid	\$ 12,000.00		
University	7,598.00		
Gift	42,712.69		
Endowment	39,377.19	\$ 101,687.88	
Fellowships			
Gift	\$ 25,966.66		
Endowment	12,171.22	38,137.88	
Convention, Travel, and Membership Dues		5,274.30	
Publicity		1,465.72	
Branner Seismometer Station		528.74	
Stanford Associates and Stanford Fund		46,697.64	193,792.16
Gross Operating Expense			\$8,019,819.32
Expenditures for Additions to Educational Plant			
Hoover Library on War, Revolution, and Peace	\$ 1,403.37		
Academic Departmental Equipment			
Graduate School of Business	\$ 780.38		
School of Education	23.50		
School of Biology	76.56		
School of Letters	169.53		
School of Social Sciences	340.12		
School of Physical Sciences	927.33		
School of Physical Education	807.11		
Food Research Institute	73.08		
Libraries	42,868.29	46,065.90	47,469.27
Gross Expenditures before Amortization			<u>\$8,067,088.59</u>

SUMMARY OF BONDS AND STOCKS FOR YEAR ENDED AUGUST 31, 1943

	Par Value	Book Value
Bonds, Merged Funds	\$15,148,500.00	\$14,123,743.54
Bonds, Separate Invested Fund	417,000.00	385,098.38
Bonds, Agency Division	110,100.00	106,592.45
Total Bonds	\$15,675,600.00	\$14,615,434.37
Preferred Stocks, Merged Funds		\$ 1,983,670.18
Preferred Stocks, Separately Invested Funds		118,790.60
Preferred Stocks, Agency Division		24,269.00
Total Preferred Stocks		\$ 2,126,729.78
Common Stocks, Merged Funds		\$ 6,125,969.83
Common Stocks, Separately Invested Funds		185,686.98
Common Stocks, Agency Division		23,147.19
Total Common Stocks		\$ 6,334,804.00
Total Stocks		\$ 8,461,533.78
Total Stocks and Bonds		\$23,076,968.15

SECURITY INVESTMENTS OF MERGED FUNDS AT AUGUST 31, 1943

BONDS

Par Value	United States Government and Municipal Bonds	Book Value
\$ 500,000	United States of America Cert. of Indebtedness $\frac{7}{8}$, 1944	\$ 500,000.00
750,000	United States of America Cert. of Indebtedness $\frac{7}{8}$, 1944	750,000.00
210,000	Reconstruction Finance Corporation "W" 1, 1944	210,000.00
300,000	United States of America Treasury "D" $\frac{3}{4}$, 1944	300,000.00
160,000	Commodity Credit Corporation "G" $1\frac{1}{8}$, 1945	160,000.00
100,000	United States of America Treasury $1\frac{1}{2}$, 1947	100,000.00
300,000	United States of America Treasury $1\frac{3}{4}$, 1948	300,000.00
180,000	Federal Farm Mortgage Corporation 3, 1949	180,000.00
300,000	United States of America Treasury 2, 1950-48	300,000.00
520,000	United States of America Treasury 2, 1951-49	520,000.00
300,000	United States of America Treasury 2, 1951-49	300,000.00
200,000	United States of America Treasury $3\frac{1}{8}$, 1952-49	200,000.00
500,000	United States of America Treasury 4, 1954-44	500,000.00
525,000	United States of America Treasury $2\frac{1}{2}$, 1954-52	525,000.00
330,000	United States of America Treasury 2, 1955-51	330,000.00
500,000	United States of America Treasury $2\frac{1}{4}$, 1955-52	500,000.00
320,000	United States of America Treasury $2\frac{1}{2}$, 1958-56	320,000.00
300,000	United States of America Treasury $2\frac{1}{2}$, 1968-63	300,000.00
400,000	United States of America Treasury $2\frac{1}{2}$, 1969-64	400,000.00
100,000	City of Los Angeles, Dept. of Water & Power $3\frac{1}{2}$, 1976	98,000.00
5,000	Corporate Stock, City of New York	6,050.00
160,500	United States of America Bonds, Various Series	153,373.00
\$ 6,980,500	Total United States Government and Municipal Bonds	\$6,952,423.00
Public Utility Bonds		
\$ 99,000	American Gas & Electric Company $3\frac{3}{4}$, 1970	\$ 106,151.24
300,000	American Telephone & Telegraph Company 3, 1956	313,838.50
100,000	Boston Edison Company 1st $2\frac{3}{4}$, 1970	100,000.00
250,000	Cleveland Electric Illuminating Company 3, 1970	264,114.00
5,000	Consumers Power Company $3\frac{3}{4}$, 1966	5,525.00
100,000	Consumers Power Company $3\frac{1}{2}$, 1967	100,000.00
5,000	Central Maine Power Company $3\frac{1}{2}$, 1968	5,400.00
100,000	Illinois Light & Power Company, 1st & Ref. 5, 1956	96,282.00
200,000	New Orleans Public Service, Inc., 5, 1955-52	190,890.49
98,000	Oklahoma Natural Gas Company $3\frac{3}{4}$, 1955	98,000.00
1,000	Pacific Gas & Electric Company $3\frac{3}{4}$, 1961	1,110.00
390,000	Pacific Gas & Electric Company 1st & Ref. $3\frac{1}{2}$, 1967	390,000.00
200,000	Philadelphia Company 1st & Ref. $3\frac{1}{2}$, 1961	200,000.00
100,000	Philadelphia Electric Company $3\frac{1}{2}$, 1967	100,000.00
50,000	Potomac Edison Company 1st $4\frac{1}{2}$, 196	48,956.30
200,000	Puget Sound Light & Power Company $4\frac{1}{4}$, 1972	208,222.50
300,000	Southern California Edison Company Ltd., 3, 1965	300,000.00
235,000	Southern California Gas Company $3\frac{1}{4}$, 1970	240,954.58
5,000	Westchester Lighting Company $3\frac{1}{2}$, 1967	5,475.00
\$ 2,738,000	Total Public Utility Bonds	\$ 2,774,919.61

SECURITY INVESTMENTS OF MERGED FUNDS—Continued**BONDS—Concluded**

Par Value	Railroad Bonds	Book Value
\$ 5,000	Atchison, Topeka & Santa Fe 4% General Mtg. 4, 1995	\$ 5,900.00
200,000	Atchison, Topeka & Santa Fe 4, 1995	178,801.50
400,000	Baltimore & Ohio 1st 5, 1948	322,028.83
200,000	Chicago, Burlington & Quincy Railway Company 4, 1958	162,003.00
235,000	Chicago, Indiana & Southern 1st 4, 1956	195,276.50
100,000	Cleveland, Cincinnati, Chicago & St. Louis 4, 1993, Reg.	86,201.37
100,000	Erie Railroad Company 4, 1995	69,756.77
100,000	Great Northern Railway Company 4½, 1977	82,514.00
100,000	International Railways of Central America 5, 1972	50,050.57
285,000	Louisville & Nashville 3¾, 2003	257,259.05
100,000	Michigan Central 4½, 1979	67,499.75
100,000	New York Central Railroad 3¼, 1952	63,827.25
383,000	New York, Chicago & St. Louis 4½, 1978	328,810.84
500,000	Northern Pacific 3, 2047	210,953.32
100,000	Pennsylvania Railroad 4½, 1965	100,000.00
75,000	Pennsylvania Railroad 3¾, 1970	68,116.61
125,000	Pennsylvania Railroad 4¼, 1981	125,000.00
5,000	Pennsylvania Railroad General Mtg. Series "B" 5, 1968	5,800.00
375,000	Southern Pacific Railroad Company 4, 1955	243,344.38
200,000	Southern Railway Co. 5, 1994	199,227.42
200,000	Western Maryland 4, 1952	184,834.75
300,000	West Shore 4, 2361	216,378.28
\$ 4,188,000	Total Railroad Bonds	\$3,223,584.19
	Miscellaneous Bonds	
\$ 200,000	Chicago Railway Company 5, 1927 (25% pd.)	\$ 115,515.39
10,000	Dominion of Canada 4, 1960	11,100.00
300,000	Shell Union Oil Corporation 2½, 1954	294,131.00
250,000	Socony Vacuum Oil Company, Inc., 3, 1964	250,000.00
250,000	Texas Corporation 3, 1965	250,000.00
200,000	S. D. Warren Company 4¼, 1952	200,070.35
52,000	Youngstown Sheet & Tube Company 4, 1948	52,000.00
\$ 1,262,000	Total Miscellaneous Bonds	\$ 1,172,816.74
\$15,148,500	Total Bonds, Merged Funds	\$14,123,743.54

SECURITY INVESTMENTS OF MERGED FUNDS AT AUGUST 31, 1943

BONDS

Par Value	United States Government and Municipal Bonds	Book Value
\$ 500,000	United States of America Cert. of Indebtedness $\frac{7}{8}$, 1944	\$ 500,000.00
750,000	United States of America Cert. of Indebtedness $\frac{7}{8}$, 1944	750,000.00
210,000	Reconstruction Finance Corporation "W" 1, 1944	210,000.00
300,000	United States of America Treasury "D" $\frac{3}{4}$, 1944	300,000.00
160,000	Commodity Credit Corporation "G" $1\frac{1}{8}$, 1945	160,000.00
100,000	United States of America Treasury $1\frac{1}{2}$, 1947	100,000.00
300,000	United States of America Treasury $1\frac{1}{4}$, 1948	300,000.00
180,000	Federal Farm Mortgage Corporation 3, 1949	180,000.00
300,000	United States of America Treasury 2, 1950-48	300,000.00
520,000	United States of America Treasury 2, 1951-49	520,000.00
300,000	United States of America Treasury 2, 1951-49	300,000.00
200,000	United States of America Treasury $3\frac{1}{4}$, 1952-49	200,000.00
500,000	United States of America Treasury 4, 1954-44	500,000.00
525,000	United States of America Treasury $2\frac{1}{2}$, 1954-52	525,000.00
330,000	United States of America Treasury 2, 1955-51	330,000.00
500,000	United States of America Treasury $2\frac{1}{4}$, 1955-52	500,000.00
320,000	United States of America Treasury $2\frac{1}{2}$, 1958-56	320,000.00
300,000	United States of America Treasury $2\frac{1}{2}$, 1968-63	300,000.00
400,000	United States of America Treasury $2\frac{1}{2}$, 1969-64	400,000.00
100,000	City of Los Angeles, Dept. of Water & Power $3\frac{1}{2}$, 1976	98,000.00
5,000	Corporate Stock, City of New York	6,050.00
160,500	United States of America Bonds, Various Series	153,373.00
\$ 6,980,500	Total United States Government and Municipal Bonds	\$6,952,423.00
Public Utility Bonds		
\$ 99,000	American Gas & Electric Company $3\frac{3}{4}$, 1970	\$ 106,151.24
300,000	American Telephone & Telegraph Company 3, 1956	313,838.50
100,000	Boston Edison Company 1st $2\frac{3}{4}$, 1970	100,000.00
250,000	Cleveland Electric Illuminating Company 3, 1970	264,114.00
5,000	Consumers Power Company $3\frac{1}{4}$, 1966	5,525.00
100,000	Consumers Power Company $3\frac{1}{2}$, 1967	100,000.00
5,000	Central Maine Power Company $3\frac{1}{2}$, 1968	5,400.00
100,000	Illinois Light & Power Company, 1st & Ref. 5, 1956	96,282.00
200,000	New Orleans Public Service, Inc., 5, 1955-52	190,890.49
98,000	Oklahoma Natural Gas Company $3\frac{3}{4}$, 1955	98,000.00
1,000	Pacific Gas & Electric Company $3\frac{3}{4}$, 1961	1,110.00
390,000	Pacific Gas & Electric Company 1st & Ref. $3\frac{1}{2}$, 1967	390,000.00
200,000	Philadelphia Company 1st & Ref. $3\frac{1}{2}$, 1961	200,000.00
100,000	Philadelphia Electric Company $3\frac{1}{2}$, 1967	100,000.00
50,000	Potomac Edison Company 1st $4\frac{1}{2}$, 1961	48,956.30
200,000	Puget Sound Light & Power Company $4\frac{1}{4}$, 1972	208,222.50
300,000	Southern California Edison Company, Ltd., 3, 1965	300,000.00
235,000	Southern California Gas Company $3\frac{3}{4}$, 1970	240,954.58
5,000	Westchester Lighting Company $3\frac{1}{2}$, 1967	5,475.00
\$ 2,738,000	Total Public Utility Bonds	\$ 2,774,919.61

SECURITY INVESTMENTS OF MERGED FUNDS—Continued**BONDS—Concluded**

Par Value	Railroad Bonds	Book Value
\$ 5,000	Atchison, Topeka & Santa Fe 4% General Mtg. 4, 1995	\$ 5,900.00
200,000	Atchison, Topeka & Santa Fe 4, 1995	178,801.50
400,000	Baltimore & Ohio 1st 5, 1948	322,028.83
200,000	Chicago, Burlington & Quincy Railway Company 4, 1958	162,003.00
235,000	Chicago, Indiana & Southern 1st 4, 1956	195,276.50
100,000	Cleveland, Cincinnati, Chicago & St. Louis 4, 1993, Reg.	86,201.37
100,000	Erie Railroad Company 4, 1995	69,756.77
100,000	Great Northern Railway Company 4½, 1977	82,514.00
100,000	International Railways of Central America 5, 1972	50,050.57
285,000	Louisville & Nashville 3¾, 2003	257,259.05
100,000	Michigan Central 4½, 1979	67,499.75
100,000	New York Central Railroad 3¼, 1952	63,827.25
383,000	New York, Chicago & St. Louis 4½, 1978	328,810.84
500,000	Northern Pacific 3, 2047	210,953.32
100,000	Pennsylvania Railroad 4½, 1965	100,000.00
75,000	Pennsylvania Railroad 3¾, 1970	68,116.61
125,000	Pennsylvania Railroad 4¼, 1981	125,000.00
5,000	Pennsylvania Railroad General Mtg. Series "B" 5, 1968	5,800.00
375,000	Southern Pacific Railroad Company 4, 1955	243,344.38
200,000	Southern Railway Co. 5, 1994	199,227.42
200,000	Western Maryland 4, 1952	184,834.75
300,000	West Shore 4, 2361	216,378.28
\$ 4,188,000	Total Railroad Bonds	\$3,223,584.19
	Miscellaneous Bonds	
\$ 200,000	Chicago Railway Company 5, 1927 (25% pd.)	\$ 115,515.39
10,000	Dominion of Canada 4, 1960	11,100.00
300,000	Shell Union Oil Corporation 2½, 1954	294,131.00
250,000	Socony Vacuum Oil Company, Inc., 3, 1964	250,000.00
250,000	Texas Corporation 3, 1965	250,000.00
200,000	S. D. Warren Company 4¼, 1952	200,070.35
52,000	Youngstown Sheet & Tube Company 4, 1948	52,000.00
\$ 1,262,000	Total Miscellaneous Bonds	\$ 1,172,816.74
\$15,148,500	Total Bonds, Merged Funds	\$14,123,743.54

SECURITY INVESTMENTS OF MERGED FUNDS—Continued

Shares	PREFERRED STOCKS	B.
1,500	Atchison, Topeka & Santa Fe Railway Company 5%	\$ 1
523	California Packing Corporation 5%	1
1,000	Consolidated Edison Company (N.Y.) \$5	1
2,900	Crown Zellerbach Corporation \$5	2
1,000	Goodyear Tire & Rubber Company \$5	
500	Iowa Power & Light Company 6%	
1,300	National Supply Company of Delaware 7%	1
1,000	New York Power & Light Corporation 7%	1
500	Northern States Power Company (Minn.) \$5	
500	Ohio Power Company 4½%	
35	Pacific Gas & Electric Company 6%	
15	Pacific Gas & Electric Company 5½%	
1,000	Pure Oil Company 6%	
1,000	San Diego County Water Company 7%	
2,125	Soundview Pulp Company 6%	2
4,000	Southern California Edison Company, Ltd., 5½%	1
4,000	Southern California Gas Company 6%	1
1,000	Tide Water Associated Oil Company \$4.50	1
1,000	United States Steel Corporation 7%	1
1,000	Union Electric Company, Missouri, \$4.50	1
Total Preferred Stocks, Merged Funds		\$1.8
COMMON STOCKS		
2,000	Aetna Insurance Company	\$ 1
2,500	Air Reduction Company, Inc.	1
800	American Brake Shoe Company	
3,500	American Smelting & Refining Company	1
4,000	American Trust Company (San Francisco)	1
3,000	American Viscose Corporation	
2,200	Atchison, Topeka & Santa Fe Railway Company	1
6,000	California Packing Corporation	1
2,000	A. M. Castle & Company	
3,000	Caterpillar Tractor Company	1
2,000	Chesapeake & Ohio Railway Company	1
2,000	Chrysler Corporation	1
2,000	Commercial Investment Trust Corporation	
1,000	Commonwealth & Southern Corporation \$6	
4,000	Commonwealth Edison Company	1
1,100	Connecticut Light & Power Company	
1,000	Continental Can Company, Inc.	
3,000	Consolidated Edison Company of New York, Inc.	
2,350	Firemen's Fund Insurance Company	1
1,400	Food Machinery Corporation	
4,500	General Electric Company	1
3,000	General Motors Corporation	1
500	Guaranty Trust Company of New York	1
2,500	Gulf Oil Corporation	1
Carried forward		\$2.1

SECURITY INVESTMENTS OF MERGED FUNDS—Concluded**COMMON STOCKS—Concluded**

	Book Value
Brought forward	\$2,369,358.32
Hartford Fire Insurance Company	78,143.54
Insurance Company of North America	101,930.42
Irving Trust Company	151,225.74
Kearney & Tracker Corporation	25,640.51
Kennecott Copper Corporation	90,633.00
Liggett & Myers Tobacco Company "B"	90,808.49
McKesson & Robbins, Inc.	88,605.00
Montgomery Ward & Company, Inc.	93,404.75
National City Bank of New York	92,854.00
National Fire Insurance Company	102,487.01
Northern Natural Gas Company	64,012.00
Pacific Gas & Electric Company	124,751.33
Pacific Lighting Corporation	151,289.53
Pacific Telephone & Telegraph Company	207,958.63
Paraffine Company, Inc.	63,122.23
Pennsylvania Railroad Company	96,434.50
Philadelphia Electric Company	17,126.50
Rayonier, Inc., Conv. \$2	119,837.16
R. J. Reynolds Tobacco Company "B"	43,181.42
Sears, Roebuck and Company	143,152.00
Socony Vacuum Oil Company, Inc.	134,713.21
Southern California Edison Company, Ltd.	132,966.41
Standard Oil Company of California	103,771.83
Standard Oil Company (Indiana)	162,816.45
Standard Oil Company (New Jersey)	125,015.08
Travelers Insurance Company	100,002.59
Union Carbide & Carbon Corporation	131,131.89
Union Oil Company of California	202,064.89
Union Pacific Railroad Company	150,379.23
Underwood Elliott Fisher Company	64,854.34
U.S. & Inter. Securities Corp. \$5	92,768.00
Wells Fargo Bank & Union Trust Company	171,230.00
Westinghouse Air Brake Company	81,971.20
Westinghouse Electric & Manufacturing Company	156,313.63
Miscellaneous Securities of Nominal Value	15.00
Total Common Stocks, Merged Funds	\$8,125,989.83
Total Corporate Stocks, Merged Funds	\$8,109,840.01

SECURITY INVESTMENTS OF SEPARATELY INVESTED FUNDS AT AUGUST 31, 1943

GEORGE E. CROTHERS LAW SCHOOL SCHOLARSHIP FUND		
Par Value or Shares	Common Stocks	Book Value
1,000	Orpheum Building Company, Common Stock	\$ 3,000.00
	Total George E. Crothers Law School Scholarship Fund	\$ 3,000.00
GEORGE E. GAMBLE SCHOLARSHIP FUND		
	Preferred Stocks	
800	Pacific Gas & Electric Company 6%	\$ 16,940.00
800	Pacific Public Service Company \$1.30	17,800.00
90	Public Service Corporation, N.J. \$.50	8,198.00
	Total Preferred Stocks	\$ 42,938.00
	Common Stocks	
200	American Smelting & Refining Company	\$ 7,946.26
200	General Motors Corporation	7,093.62
400	Paraffine Companies, Inc.	18,500.00
200	Proctor & Gamble Company	11,075.00
300	Standard Oil Company of California	8,458.50
	Total Common Stocks	\$ 53,073.38
	Total George E. Gamble Scholarship Fund	\$ 96,011.38
LOUIS S. HAAS FUND		
170	Wells Fargo Bank & Union Trust Company	\$ 37,400.00
	Total Louis S. Haas Fund	\$ 37,400.00
EDWARD WHITING HOPKINS FUND		
	Bonds	
\$ 5,000	American Gas & Electric Company 2½, 1950	\$ 5,091.43
5,000	American Power & Light Company 6, 2016	5,226.50
5,000	Baltimore & Ohio Railroad 5, 1948	3,335.32
5,000	Great Northern Railway Company 4½, 1977	4,070.25
\$ 20,000	Total Bonds	\$ 17,723.50
	Preferred Stocks	
8	California Packing Corporation 5%	\$ 400.00
100	Pacific Gas & Electric Company 6%	2,575.00
	Total Preferred Stocks	\$ 2,975.00
	Common Stocks	
100	Montgomery Ward & Company	\$ 2,619.75
	Total Edward Whiting Hopkins Fund	\$ 23,318.25

SECURITY INVESTMENTS OF SEPARATELY INVESTED FUNDS—Continued

MARGARET D. HUSTON ESTATE		
Par Value or Shares	Bonds	Book Value
\$ 1,000	Great Northern Railway Company 4½, 1977	\$ 870.26
1,000	Louisville & Nashville Railroad Company 3¾, 2003	806.50
1,000	Northern Pacific Railway Company 4, 1997	972.76
1,000	Southern California Gas Company 3¾, 1970	1,036.50
1,000	Southwestern States Telephone Company 6, 1949	600.00
\$ 6,000	Total Bonds	\$ 4,286.02
	Preferred Stocks	
10	Atchison, Topeka & Santa Fe Railway Company 5%	\$ 598.95
	Total Preferred Stocks	\$ 598.95
	Common Stocks	
30	American Smelting & Refining Company	\$ 1,304.50
25	American Trust Company (San Francisco)	941.75
625	American Woodlite Corporation	1.00
50	Commonwealth Edison Company	1,160.52
20	General Motors Corporation	966.63
25	Independent Refining Company	1.25
40	Pacific Lighting Corporation	1,972.17
40	Southern California Edison Company, Ltd.	1,136.14
	Total Common Stocks	\$ 7,483.98
	Total Margaret D. Huston Estate	\$ 12,368.93
	JOSEPH HORTON KILE ENDOWMENT FUND	
100	First National Building Company of Stockton	\$ 2,500.00
	Total Joseph Horton Kile Endowment Fund	\$ 2,500.00
	LAW SCHOOL, CLASS OF 1941	
100	United States of America Savings "F," 1954	\$ 74.00
	Total Law School, Class of 1941	\$ 74.00
	RICHARD F. SANDWICK FUND	
\$ 5,000	Standard Power & Light Corporation 6, 1957	\$ 5,000.00
<u>\$ 5,000</u>	Total Richard F. Sandwick Fund	\$ 5,000.00

OLON AND JEANETTE BELL SHEDD FUND

\$ 97,000 Total Public Utility Bonds

SECURITY INVESTMENTS OF SEPARATELY INVESTED FUNDS—Continued**SPECIAL LIBRARY ENDOWMENT—Concluded**

Railroad Bonds	Book Value
Baltimore & Ohio 1st 5, 1948	\$ 16,586.70
Cleveland, Cincinnati, Chicago & St. Louis Gen. Reg. 4, 1993	6,100.75
Great Northern Railway Company Gen. 3¾, 1967	8,426.50
Louisville & Nashville 1st & Ref. 3¾, 2003	8,126.50
New York Central 3¾, 1952	9,901.50
Pennsylvania Railroad Gen. 3¾, 1970	9,475.25
Pennsylvania Railroad Gen. 4¼, 1981	5,207.34
Southern Pacific Company 1st & Ref. 4, 1955	18,115.50
Total Railroad Bonds	\$ 81,940.04
Industrial and Miscellaneous Bonds	
Shell Union Oil Corporation S.F. Deb. 2½, 1954	\$ 19,776.50
Socony Vacuum Oil Company S.F. Deb. 3, 1964	20,670.24
Texas Corporation Deb. 3, 1965	20,941.45
Total Industrial and Miscellaneous Bonds	\$ 61,388.19
Total Special Library Endowment Bonds	\$334,430.61
Preferred Stocks	
Crown Zellerbach Corporation \$5	\$ 16,095.85
Pacific Gas & Electric Company 6%	13,800.00
Total Preferred Stock	\$ 29,895.85
Common Stocks	
American Smelting & Refining Company	\$ 11,707.10
Chrysler Corporation	11,569.28
General Electric Company	10,241.66
General Motors Corporation	11,080.54
Kennecott Copper Corporation	2,770.88
Montgomery Ward & Company	8,737.18
Standard Oil Company of California	3,934.75
Standard Oil Company of New Jersey	3,423.25
Westinghouse Air Brake Company	7,991.25
Total Common Stocks	\$ 71,455.89
Total Special Library Endowment	\$435,782.35

SECURITY INVESTMENTS OF SEPARATELY INVESTED FUNDS—*Concluded*

AGENCY DIVISION

STANFORD ALUMNI ASSOCIATION LIFE MEMBERSHIP FUND

Bonds		
Par Value or Shares		Bo
	United States Government and Municipal Bonds	
\$ 10,000	United States Savings Bonds "D," 1950	\$
15,000	United States Savings Bonds "G" 2½, 1954	1
10,000	United States Treasury 2½, 1969-64	1
\$ 35,000	Total United States Government and Municipal Bonds	\$ 3
Public Utility Bonds		
\$ 10,000	American Gas & Electric Co. S.F. Deb. 2¾, 1950	\$ 1
10,000	American Telephone & Telegraph Co. Conv. Deb. 3, 1956	1
5,000	New Orleans Public Service Co. 1st & Ref. 5, 1952	
5,000	Southern California Gas Co. 1st 3¼, 1970	
\$ 30,000	Total Public Utility Bonds	\$ 3
Railroad Bonds		
\$ 5,000	Great Northern Railway Company Gen. 3¾, 1967	\$
5,000	Pennsylvania Railroad Company Gen. 3¾, 1970	
5,000	Southern Pacific Railroad Company 1st Ref. 4, 1955	
\$ 15,000	Total Railroad Bonds	\$ 1
Industrial Bonds		
\$ 10,000	Shell Union Oil Corporation S.F. Deb. 2½, 1954	\$
10,000	Socony Vacuum Oil Company S.F. Deb. 3, 1964	10
10,000	Texas Corporation Deb. 3, 1965	10
\$ 30,000	Total Industrial Bonds	\$ 3
\$110,000	Total Bonds	\$10
Preferred Stocks		
500	Pacific Gas & Electric Company 6%	\$ 1
100	Crown Zellerbach Corporation 5%	
	Total Preferred Stocks	\$ 2
Common Stocks		
100	American Smelting & Refining Company	\$
100	General Electric Company	:
100	General Motors Corporation	:
100	R. J. Reynolds Tobacco Company "B"	:
100	Standard Oil Company of California	:
100	Standard Oil Company of New Jersey	:
50	Westinghouse Electric & Manufacturing Company	:
	Total Common Stocks	\$ 2
	Total Stanford Alumni Association Life Membership Fund Security Investments	\$15

**ENDOWMENT INVESTMENTS, REAL ESTATE AND IMPROVEMENTS
FOR YEAR ENDED AUGUST 31, 1943**

General Funds

California

County and City of San Francisco

2207 Buchanan St., Lot 6
2217 Buchanan St., Lot 1
2215 Buchanan St., Lot 2
2211 Buchanan St., Lot 4
2313 Buchanan St., Lot 3
2205 Buchanan St., Lot 7
2203 Buchanan St., Lot 8
2311 Clay St., Lot 12
2407 Clay St., Lot 31
2402-26-28-30 Sacramento St., Lot 10
2300-12 Sacramento St., Lot 9
2117 Webster St., Lot 2
2111 Webster St., Lot 4
2107 Webster St., Lot 6
2109 Webster St., Lot 5
2103 Webster St., Lots 7-8
2115 Webster St., Lot 3

County and City of Los Angeles

414 South La Brea St., Lot 394

County of San Joaquin

136 Miner St., Stockton, Lot 9

Marin County

Undivided $\frac{1}{2}$ interest in Schafter Ranch

Santa Clara and San Mateo Counties

Spring Valley Searsville Lake, 265.098 acres
Folger Tract, Searsville Lake, 5.38 acres
Water Development, Searsville Lake
Lot 76, between County Road and Southern Pacific tracks
Lot 89, Palo Alto Farm
Lots 15-16, Stanford Week-End Acres, .384 acre
Seale Tract, in vicinity of Palo Alto High School
Felt Reservoir
Felt Lake Dam
Gilmore Park Improvements, Lots 68 and 69
Felt Tract
Santa Cruz and Mayfield Road, 12.94 acres
Main St., Mayfield District, Palo Alto, Lot 82
Portola Woods, 41.89 acres
Portola Woods, N and W of Searsville Lake, 115.51 acres
Portola Woods, N and W of Searsville Lake, 9.96 acres
Portola Woods, Lot 108, 22.304 acres
Coon Tract
Drexler Hall Property, 36.74 acres
San Mateo County, Lot 100, 9.79 acres
North Stanford Week-End Acres, Schroder Picnic Grounds
North Stanford Week-End Acres, Lots 22-23
North Stanford Week-End Acres, Lot 24
Lot 104, adjoining Searsville Lake, 1.42 acres and improvements
Stevens Creek, 2.14 acres (Rogers Property)
Page Mill Road, Lot 42
Palo Alto Farm and improvements, omitting campus
Mayfield Garage, 101 Highway
SE corner S. First and San Carlos, San Jose, Lot 2 and portion Lot 3
Lots 4 and 5 Degreer Subdivision 38.632 acres

Total General Funds, Real Estate and Improvements

\$2,024,036.69

ENDOWMENT INVESTMENTS, REAL ESTATE AND IMPROVEMENTS—Concluded**Restricted Funds****California****County and City of San Francisco****Farnsworth Fund**

- 675 Brannan St., with improvements
- 1775 Golden Gate Ave., unimproved
- 435-41 Golden Gate Ave. and 34-46 Redwood St., with improvements
- 2225 Mission St., with improvements
- 660 Third St., with improvements
- 1220 Valencia St., with improvements

Lane Medical Library Fund

- 2018 Webster St., with improvements

Flora Sharon Bequest

- 167-69 Jessie St., with improvements

Santa Clara County**Ida S. Oldroyd Fund**

- 548 Alvarado Row, Stanford University, with improvements

O. W. Dunn Fund

- 477 Everett St., Palo Alto, with improvements

Monterey County**Farnsworth Fund**

- Lot 15, Monterey Peninsula Country Club, unimproved

Santa Cruz County**Theodore J. Hoover Fund**

- 100 sq. ft. plot in Section 35 T. 9 S.R. 4 W., unimproved

Alameda County**Ephriam Weiss Scholarship Fund**

- Lot 25, Block 1870 "D," Berkeley, with improvements

Kern County**Grace McCloskey Fund**

- 2.5 acres unimproved land

Madera County**Justitia Jane Campbell Glennie Scholarship**

- Lots 55-56 Richland Raisin Vineyard

San Joaquin County**John Williams Dobbins Loan Fund**

- 88.9 acres improved land

County and City of Los Angeles**John Laurence Frost Loan Fund**

- 164-70 N. La Brea Ave.

Utah**Henry Newell Estate Funds**

- $\frac{3}{8}$ interest in 14 mining claims in Wasatch County

- $\frac{1}{2}$ interest in 5 mining claims in Wasatch County

New York**J. M. Switzer Fund**

- 24.2 acres in Bayville, Oyster Bay, Nassau County

Total Restricted Funds, Real Estate and Improvements**\$ 497,598.70****Total General Funds, Real Estate and Improvements****2,024,036.69****Total Real Estate and Improvements****\$2,521,635.39**

	Aug. 31, 1943	Increase or — Decrease	Aug. 31, 1942	Investment Fund Assets Included in Plant
Land	\$ 324,676.61		\$ 324,676.61	\$ 21,964.64
Buildings and Structures	13,461,580.26	\$ 75,323.45	13,386,256.81	1,588,529.71
Improvements	1,304,830.91	681.24	1,304,149.67	416,666.23
Equipment	4,234,774.54	54,571.58	4,180,202.96	177,058.23
Total Assets	\$19,325,862.32	\$130,576.27	\$19,195,286.05	\$2,204,218.81
Total Assets (before Deducting Transfer)	\$19,325,862.32*	\$130,576.27	\$19,195,286.05	
Less Investment Fund Assets Included in Plant Assets	2,204,218.81	— 15,828.08	2,220,046.89	
Pension Fund Assets Included in Plant Assets	54,206.72	54,206.72		
Total Transfer	\$ 2,258,425.53	\$ 38,378.64	\$ 2,220,046.89	
Total Educational Plant Assets	\$17,067,436.79	\$ 92,197.63	\$16,975,239.16	

*SOURCE OF FUNDS INVESTED IN PLANT

Educational Plant Derived from Current Funds, First of Period	\$ 7,837,302.15
Educational Plant Additions Current Year	90,794.26
Educational Plant Adjustments	
Reduction of Indebtedness to Building Fund Loan from Other Sources	10,400.00
Total Educational Plant Derived from Current Funds	\$ 7,938,496.41
Investments Included in Plant	2,204,218.81
Acquired through Gift	8,714,811.42
Endowment Funds Borrowed	414,128.96
Belonging to Special Funds	54,206.72
	\$19,325,862.32

EDUCATIONAL PLANT ASSETS—Continued

Land	Date Ac- quired or Constructed	Aug. 31, 1943	Increase or — Decrease	Aug. 31, 1942	Investment Fund Assets Included in Plant
Hopkins Marine Station, 3.358 Acres Pacific Grove		\$ 20,006.30		\$ 20,006.30	\$ 21,964.64
Lane Medical Library Lot, San Francisco		18,633.66		18,633.66	
Nurses' Residence, San Francisco		52,429.34		52,429.34	
2302 Clay Street	\$ 27,520.00				
2322 Clay Street	4,754.17				
2324 Clay Street	4,754.17				
2200 Webster Street	6,125.00				
2330 Sacramento Street	4,813.00				
2209 Buchanan Street	4,463.00				
Nurses' Home and Training School, San Francisco		34,052.24		34,052.24	
Palo Alto Farm and Improvements		199,555.07		199,555.07	
Total Land		\$ 324,876.61		\$ 324,876.61	\$ 21,964.64
Buildings and Structures					
Athletic Plant					
Gymnasiums (Men)					
Encina, Original	1915	\$110,457.29			
Additional Wings	1930	54,361.71			
Hot-Water System	1928	2,501.60			
Remodeling	1928	11,192.32			
				\$ 178,512.92	
Administration Building	1927	106,521.50		106,521.50	
Baseball Bleachers	1930	18,831.21		18,831.21	
Basketball Pavilion	1921	153,720.82		153,720.82	
Boathouse	1938	8,250.00		8,250.00	
Golf Club House	1931	53,848.49		53,848.49	
Pro Shop, Caddie House, and Improvements	1930	28,000.00		28,000.00	

EDUCATIONAL PLANT ASSETS—Continued

	Date Ac- quired or Constructed	Aug. 31, 1943	Increase or — Decrease	Aug. 31, 1942	Investment Fund Assets Included in Plant
Buildings and Structures (Continued)					
Brought forward					
Athletic Plant (Concluded)					
Stadium					
Original Construction	1922	\$222,217.90			
First Addition	1925	186,655.12			
Second Addition	1927	196,040.02			
Stadium Track	1922	17,167.34			
Concrete Stairways	1931	14,136.32			
Toilet Facilities	1931	23,852.45			
				\$ 547,684.94	\$ 547,684.94
Swimming Pool and Bleachers	1930	\$ 58,000.00			
Locker Room and Showers	1930	38,690.29			
Swimming Pool Well and Equipment	1921	1,039.78			
Tennis Courts, Varsity and Practice	1926			97,730.07	97,730.07
Tennis Courts, Rock and Asphalt	1921			24,587.03	24,587.03
Tennis Courts, Lavatories	1926			8,665.89	8,665.89
Tennis Bleachers	1926			1,529.24	1,529.24
Track Training House (Old)	1930			3,500.00	3,500.00
Gymnasium (Women)	1911			4,374.57	4,374.57
Roble (Old)	1892			6,701.17	6,701.17
Roble (New)	1931			243,334.17	243,334.17
Swimming Pool, Roble	1931			25,092.94	25,092.94
Anatomy Animal Building	1928			8,558.56	8,558.56
Applied Mathematics Alterations				51.87	51.87
Art Gallery Thomas Welton Stanford	1917			89,305.91	89,305.91
Assay Laboratory Alterations	1918			10,536.54	10,536.54
Administration Building	1892			211,350.86	211,350.86
Bacteriological	1918			29,299.59	29,299.59
Carried forward				\$ 1,972,372.50	\$ 1,972,372.50

EDUCATIONAL PLANT ASSETS—Continued

Buildings and Structures (Continued)	Date Acquired or Constructed	Aug. 31, 1933	Increase or Decrease	Aug. 31, 1942	Investment Fund Assets Included in Plant
Brought forward		\$ 1,972,372.50		\$ 1,972,372.50	
Bacteriology Garbage Incinerator	1904	740.15		740.15	
Bacteriology Lecture Hall	1941	17,095.12		17,095.12	
Bronze Group of Stanford Family		7,250.00		7,250.00	
Chemistry Building and Laboratory	1902	234,019.49		234,019.49	
Chemistry Laboratory Alterations	1917	7,031.06		7,031.06	
Class Buildings Alterations	1904	9,918.18		9,918.18	
Class of 1931, Clock	1932	1,169.50		1,169.50	
Corporation Yard Buildings	1915	38,029.73		38,029.73	
Cubberley Educational Building	1938	503,178.91		503,178.91	
Dormitories					
Encina Hall	1891	485,140.39		485,140.39	
Encina Hall Alterations	1917	78,284.26		78,284.26	
Roble Hall	1918	352,184.13		352,184.13	320,078.70
Sequoia Hall	1891	73,990.81		73,990.81	
Sequoia Hall Alterations	1920	4,522.86		4,522.86	
Elm Cottage	1918	1,264.03		1,264.03	1,264.03
Branner Hall	1924	437,174.19		437,174.19	
Manzanita House	1924	9,339.88		9,339.88	9,339.88
Manzanita Lodge	1935	5,656.83		5,656.83	5,656.83
Mariposa House	1918	2,968.55		2,968.55	2,968.55
Toyon Hall	1923	432,992.06		432,992.06	75,000.00
Stanford Union	1921	291,904.57		291,904.57	
Lagunita Court	1935-38	718,089.81		718,089.81	476,228.83
Casa Ventura	1930-38	40,150.72		40,150.72	31,058.57
Madroño Hall	1918-34	8,717.78		8,717.78	8,240.00
Hawthorne House	1936	8,000.00		8,000.00	8,000.00
The Oaks	1940	11,977.53		11,977.53	11,977.53
Carried forward		\$ 5,753,163.04		\$ 5,753,163.04	\$ 949,812.92

EDUCATIONAL PLANT ASSETS—Continued

Buildings and Structures (Continued)	Date Ac- quired or Constructed	Aug. 31, 1913	Increase or Decrease	Aug. 31, 1942	Investment Fund Assets Included in Plant
Brought forward		\$ 5,753,163.04		\$ 5,753,163.04	\$ 949,812.92
Dwellings, Stores, and Other Campus Bldgs.	Various	177,105.10		101,784.54	45,461.98
Encina Dining Hall	1923	238,940.87	75,320.56	238,940.87	181,023.74
Engineering Laboratory	1903	52,327.38		52,327.38	
Fire Department Building	1904	3,611.30		3,611.30	
Fire Walls, Arcade	1909	1,243.45		1,243.45	
Forge and Foundry	1892	8,273.75		8,273.75	
Forge and Foundry (New)	1908	27,677.72		27,677.72	
Geological Laboratory	1905	211,980.52		211,980.52	
Graduate School of Business Building Alterations	1937	119,745.92		119,745.92	
Guild Hospital	1921	8,979.59		8,979.59	
High-Voltage Laboratory, Harris J. Ryan	1926	98,345.60		98,345.60	
High-Voltage Laboratory (Original)	1914	4,736.53		4,736.53	
High-Tension Laboratory Remodeling for Medical Adviser of Women					
Hoover Library on War, Revolution, and Peace	1928	5,647.56		5,647.56	
Hopkins Marine Station Biological Laboratory,	1941	605,107.93	2.89	605,105.04	
Pacific Grove	1917	24,533.38		24,533.38	
Hopkins Marine Station Laboratory and Grounds,					
Pacific Grove	1905-21	11,763.80		11,763.80	
Hopkins Marine Station, Janitor's Cottage,					
Pacific Grove					
Hydraulic Laboratory	1926	3,551.75		3,551.75	
Jacques Loeb Laboratory	1891	35,036.33		35,036.33	
Lagunita Fountain	1928	113,298.64		113,298.64	
Lane Hospital Power House and Permanent Improvement, San Francisco	1938	1,027.05		1,027.05	
Laurence Frost Amphitheater	1918-22	116,621.40		116,621.40	
	1937	23,924.22		23,924.22	
Carried forward		\$ 7,646,642.83	\$ 75,323.45	\$ 7,571,319.38	\$ 1,176,298.64

EDUCATIONAL PLANT ASSETS—Continued

Buildings and Structures (Continued)		Date Ac- quired or Constructed	Aug. 31, 1943	Increase or — Decrease	Aug. 31, 1943	Investment Fund Assets Included in Plant
Brought forward			\$ 7,646,642.83	\$ 75,323.45	\$ 7,571,319.38	\$ 1,176,298.64
Libraries						
Lane Medical Library Bldg., San Francisco		1912	162,441.75		162,441.75	
University Library Building		1919	708,393.70		708,393.70	
Law Library Stacks and Installation		1927	11,931.33		11,931.33	
Machine Shop Extension		1907	8,175.33		8,175.33	
Mechanical Engineering Laboratory		1903	144,419.20		144,419.20	
Metallurgy Laboratory		1900	16,950.83		16,950.83	
Metallurgy Laboratory Extension		1916	14,295.86		14,295.86	
Military Barracks and Administration		1920	24,096.27		24,096.27	
Museum		1892	563,073.29		563,073.29	
Museum Remodeling		1910	22,728.89		22,728.89	
Medical Department, Land and Bldgs., San Francisco		1914	28,950.15		28,950.15	
Medical School Bldg. and Grounds, San Francisco		1914	139,911.90		139,911.90	
Mausoleum			12,168.88		12,168.88	
Memorial Church		1903-9	622,725.74		622,725.74	
Memorial Court		1903	5,851.58		5,851.58	
Memorial Hall		1937	511,967.26		511,967.26	
Natural Sciences Building		1903	284,361.16		284,361.16	
Nursery, Green House		1925	3,607.30		3,607.30	
Nursery, Lath House		1923	1,548.80		1,548.80	
Nurses' Home and Training School, San Francisco		1922	432,666.38		432,666.38	
Nurses' Residences, San Francisco			68,490.65		68,490.65	
2302 Clay Street		1923	\$34,995.79			
2322 Clay Street			2,758.50			
2224 Clay Street	to		5,672.62			
2200 Webster Street			9,289.08			
2311 Buchanan Street			7,691.09			
2313 Buchanan Street		1930	8,083.57			

EDUCATIONAL PLANT ASSETS—Continued

Buildings and Structures (Concluded)	Date Acquired or Constructed	Aug. 31, 1943	Increase or — Decrease	Aug. 31, 1942	Investment Fund Assets Included in Plant
Brought forward		\$11,435,399.08	\$ 75,323.45	\$11,360,075.63	\$1,176,298.64
Press Building	1917, '27, '30	39,118.59		39,118.59	
Press Building	1930	66,674.29		66,674.29	
Press Bindery Rooms	1925	3,078.41		3,078.41	
Press Building Annex for <i>Stanford Daily</i>	1926-35	3,381.29		3,381.29	
Philosophy Building Alterations	1920	13,904.00		13,904.00	
Philosophy Building Additions	1921	260.81		260.81	
Power House and Oil Cisterns	1903	11,627.87		11,627.87	
Power House, Heating Plant	1913	66,982.46		66,982.46	
President's House	1917	152,169.56		152,169.56	
President's House Tennis Courts	1921	1,323.12		1,323.12	
Primary School	1903	4,385.42		4,385.42	
Quadrangle, Inner	1891-93	572,564.87		572,564.87	
Quadrangle, Outer	1899-1906	291,879.22		291,879.22	
Quadrangle, Gateways	1892	1,444.00		1,444.00	
Rest Room (Women), near Memorial Church	1927	3,389.25		3,389.25	
Ruth Lucie Stern Research Building	1940	97,000.00		97,000.00	
Searsville Dam and Reservoir	1919	4,660.16		4,660.16	
Sidewalks, Artificial Stone	1892	21,321.91		21,321.91	
Stanford Hospital Building, San Francisco	1918	553,071.04		553,071.04	412,231.07
Stanford Hospital, New Wing	1930	33,910.61		33,910.61	
Stanford Union Building (see Dormitories)					
Store Room (General), Corporation Yard	1906	2,789.82		2,789.82	
Substation, Electrical	1918	37,536.50		37,536.50	
Transformer Vault	1938	8,183.46		8,183.46	
Terrace	1903	35,524.52		35,524.52	
Total Buildings and Structures		\$13,461,580.26	\$ 75,323.45	\$13,386,256.81	\$1,588,529.71

EDUCATIONAL PLANT ASSETS—Continued

	Aug. 31, 1943	Increase or — Decrease	Aug. 31, 1942	Investment Fund Assets Included in Plant
Improvements				
Arboretum Planting Unit No. 17	\$ 467.36	\$	467.36	
Athletic Plant: Baseball and Football Fields (Old)	2,000.00		2,000.00	
Football Field Flood Lighting	3,130.15		3,130.15	
Golf Course	160,000.00		160,000.00	
Track (Old)	728.66		728.66	
Track, Women's Running	1,574.63		1,574.63	
Tennis Courts and Hockey Fields	8,614.95		8,614.95	
Assembly Hall Alterations	1,511.74		1,511.74	
Cubberley Education Building	5,580.10		5,580.10	
Dormitories: Branner Hall Grounds and Walks	9,323.50		9,323.50	
Lagunita Court Grounds and Walks	791.33		791.33	\$ 791.33
Toyon Hall Grounds and Walks	10,474.52		10,474.52	
Stanford Union Grounds and Walks	7,701.47		7,701.47	
Stanford Union Fountain	2,599.83		2,599.83	
Drainage System: Underground	7,584.80		7,584.80	
Underground, Subdivision	1,022.28		1,022.28	
Women's Athletic Fields	1,089.47		1,089.47	512.57
Surface	5,019.13		5,019.13	
Electric Lines, Educational Area Lighting System	31,337.09		31,337.09	
Electric Lines, Educational Area Arc System	3,831.06		3,831.06	1,180.44
Electric Meters	467.49		467.49	
Electric Lines, Subdivision Arc System	2,082.18		2,082.18	2,008.65
Electric Lighting System, University Avenue	7,442.58		7,442.58	
Encina Dining Hall Grounds and Walks	2,754.20		2,754.20	
Fencing, Subdivision No. 3	957.99		957.99	957.99
Fire Protection	2,726.09		2,726.09	2,671.71
Fire Alarm System, Campus	9,118.31		9,118.31	
Governor's Avenue Grading and Leveling	866.65		866.65	866.65
Highway Frontage Improvements	13,632.43		13,632.43	
Hoover Library on War, Revolution, and Peace	17,444.82	\$ 681.24	16,763.58	
Palm Drive Entrance	41,735.06		41,735.06	

	Aug. 31, 1943	Increase or — Decrease	Aug. 31, 1942	Investment Fund Amount Included in Plant
Improvements (Concluded)				
Brought forward	\$ 363,609.87	\$ 681.24	\$ 362,928.63	\$ 8,989.34
Connalescent Home Entrance	5,234.42		5,234.42	
Inner Court	15,645.21		15,645.21	
Jacques Loeb Laboratory, Pacific Grove	2,258.64		2,258.64	
Laurence Frost Amphitheater	49,815.26		49,815.26	
Library Memorial Fountain	2,477.08		2,477.08	
Library, University, Grounds in Rear of	12.84		12.84	
Main Entrance	970.15		970.15	
Mausoleum Curb	61.91		61.91	
Memorial Hall	64,217.48		64,217.48	
Nurses' Home Tennis Court, San Francisco	234.75		234.75	
Palo Alto Tree, Bulkhead	1,740.75		1,740.75	
Portola Street, Surface	1,364.22		1,364.22	
Quad Gardens	1,380.64		1,380.64	
Retaining Wall	9,187.73		9,187.73	
Roads and Walks, Subdivision	96,994.44		96,994.44	96,994.44
Roads and Walks, Campus	186,390.25		186,390.25	1,618.67
Ryan, Harris J., High-Voltage Laboratory	6,767.26		6,767.26	
Sewerage, Campus	37,088.12		37,088.12	1,469.20
Sewerage, Subdivision	29,763.54		29,763.54	29,763.54
Steam Heating Mains	17,406.84		17,406.84	
Steam Tunnel	13,733.97		13,733.97	
San Juan Hill, Grading and Leveling	2,365.51		2,365.51	2,365.51
Surveying Subdivision	2,011.75		2,011.75	2,011.75
Surveying Subdivision No. 3	3,402.70		3,402.70	3,402.70
Telephone Lines, Underground	2,955.98		2,955.98	2,423.74
Water Development	54,416.12		54,416.12	35,806.83
Water System Subdivision	74,785.46		74,785.46	74,785.46
Water System, Searsville Booster Pump	2,857.28		2,857.28	2,857.28
Water System, Campus	218,519.65		218,519.65	117,217.76
Water System, Felt Lake 12-inch Main	37,161.09		37,161.09	36,960.01
Total Improvements	\$1,304,830.91	\$ 681.24	\$1,304,149.67	\$ 418,666.23

EDUCATIONAL PLANT ASSETS—Continued

Equipment	Aug. 31, 1943	Increase or — Decrease	Aug. 31, 1942	Investment Fund Assets Included in Plant
Athletic Plant				
Physical Education, (Men), Equipment	\$ 1,997.28	\$	1,997.28	
Roble Gymnasium, Steel Lockers	730.30		730.30	
Roble Gymnasium, Equipment	390.00		390.00	
Administration Building, B.A.C.	9,543.64		9,543.64	
Bacteriology Lecture Hall	1,510.88		1,510.88	
Financial Vice-President's Office, Furniture	4,043.90		4,043.90	
Corporation Yard	33,612.96		33,612.96	
Cubberley Education Building	26,555.60		26,555.60	
Departmental, Academic	945,806.47	2,340.67	943,465.80	
Dormitories				
Branner Hall	16,787.06		16,787.06	
Roble Hall	41,930.35		41,930.35	
Toyon Hall	22,054.47		22,054.47	
Manzanita House	2,014.79		2,014.79	2,014.79
Union Residence	4,921.83		4,921.83	
Mariposa Hall	2,643.53		2,643.53	
Elm Cottage	1,255.71		1,255.71	
Madroño Hall	4,165.69		4,165.69	
La Casita	3,325.68		3,325.68	2,325.68
Lagunita Court	48,255.39		48,255.39	48,255.39
Dining Halls				
Branner	15,692.34		15,692.34	15,692.34
Encina	54,181.35		54,181.35	
Roble	9,976.26		9,976.26	
Lagunita Court	26,287.03		26,287.03	26,287.03

EDUCATIONAL PLANT ASSETS—Continued

Equipment (Continued)	Aug. 31, 1943	Increase or — Decrease	Aug. 31, 1942	Investment Fund Assets Included in Plant
Brought forward	\$1,277,682.51	\$ 2,340.67	\$1,275,341.84	\$ 94,575.23
Fire Department	17,333.76		17,333.76	
Graduate School of Business	7,476.51	780.38	6,696.13	
Guild Hospital	1,828.14		1,828.14	
Guild Hospital at Medical Adviser of Men's Office	2,398.84		2,398.84	
Hopkins Marine Station Biological Equipment, Pacific Grove	4,915.83		4,915.83	
Incinerator, Anatomy and Bacteriology	579.11		579.11	
Internes' Home, Contents	4,017.95		4,017.95	
Jacques Loeb Laboratory, Pacific Grove	17,688.45		17,688.45	
Laurence Frost Amphitheater	6,403.62		6,403.62	
Library, University				
Books	1,379,317.81	23,712.29	1,355,605.52	
Books, Hoover War	190,179.21	4,556.56	185,622.65	
Books, Hopkins Transportation	641.43		641.43	
Books, Belgian History	1,889.56		1,889.56	
Books, Law	11,190.39	5,548.27	5,642.12	
Books, Psychology	1,357.06	787.31	569.75	
Books, Dramatic Council	123.97		123.97	
Equipment	57,444.09		57,444.09	
Library, Lane Medical, San Francisco				
Books	296,864.06	7,112.60	289,751.46	
Books, Barkan Medical History	14,266.35		14,266.35	
Books, Barkan	11,242.49		11,242.49	
Books, Gibbons	1,824.50		1,824.50	
Books, Anonymous, History	135.48		135.48	
Books, Biology	128.67	76.56	52.11	
Equipment	5,072.12		5,072.12	
Carried forward	\$3,312,001.91	\$44,914.64	\$3,267,087.27	\$ 94,575.23

EDUCATIONAL PLANT ASSETS—Concluded

Equipment (Concluded)	Aug. 31, 1943	Increase or — Decrease	Aug. 31, 1942	Investment Fund Assets Included in Plant
Brought forward	\$3,312,001.91	\$44,914.64	\$3,267,087.27	\$ 94,575.23
Library, Hopkins Marine Station, Books	24,004.22	1,151.26	22,852.96	
Library, Hoover on War, Revolution, and Peace—Equipment	12,382.83	719.24	11,663.59	
Lane Hospital, San Francisco	61,866.61		61,866.61	
Mechanician Shop	5,283.00		5,283.00	
Medical School, San Francisco, Equipment and Apparatus	34,505.49		34,505.49	
Memorial Church, Furniture	4,827.46		4,827.46	
Memorial Hall	80,530.20		80,530.20	
Museum				
Exhibits	2,191.15		2,191.15	
Egyptian Curios	4,639.01		4,639.01	
Japanese Curios	6,747.77		6,747.77	
Nurses' Home and Training School, San Francisco	28,789.15		28,789.15	
Photostat	1,933.52		1,933.52	
Power House, Electrical Equipment	25,027.43		25,027.43	
Power House	86,098.59		86,098.59	
President's House, Furniture	34,854.78		34,854.78	
President's Office	988.35		988.35	
Press				
Radium, San Francisco	203,981.45	7,786.44	196,195.01	
Ryan, Harris J., High-Voltage Laboratory	14,776.40		14,776.40	
Store Room Furniture, Corporation Yard	188,766.22		188,766.22	
Stanford Hospital, San Francisco	370.22		370.22	
Substation, Electrical	94,523.62		94,523.62	83,483.00
Treasurer's Office Furniture, San Francisco	2,886.48		2,886.48	
	2,798.68		2,798.68	
Total Equipment	\$4,234,774.54	\$54,571.59	\$4,180,202.96	\$178,058.23

Unrestricted Endowments

	Balance Aug. 31, 1912	Increases from Donors	Income	Decreases	Balance Aug. 31, 1913
Stanford, Leland and Jane Lathrop	\$21,297,736.85				\$21,297,736.85
Anonymous	10,000.00				10,000.00
Carson, W. W.	50,000.00				50,000.00
Conrad, Jean	50,000.00				50,000.00
Estes, Fred R.	500.00				500.00
Hoover, Theodore J.	1,001.00				1,001.00
Muhs, Fred R., Jr.	350.00	\$ 500.00			750.00
Pillsbury, E. S.	34,750.00				34,750.00
Kile, Joseph H.					61,500.00
Stanford New Endowment		61,500.00			123,000.00
Ford, Mary Virginia		1,050.00			1,050.00
Neuman, Lawrence		144,361.34			144,361.34
Shuffleton, Edith B.		80,009.00			80,009.00
Hammond, Leonard C. and Dorothy P.		19,000.00			19,000.00
Sundry Donors		13,521.20			13,521.20
		7.50			7.50
Total Unrestricted Endowments	\$21,444,237.85	\$319,949.04		\$-27,543.57	\$21,791,730.46

Restricted Endowments

Scholarships and Fellowships	\$ 1,303,237.84	\$ 54,312.18	\$ 6,888.50		\$ 1,364,438.52
Libraries	1,167,322.53	7,352.67	9,773.49		1,184,448.69
Departmental Use	3,098,582.81	1,805.00	-43.11	\$27,543.57	3,072,801.13
Hospital and Medical School	1,321,916.80	45,529.79	345.61		1,367,792.20
Lane Library	162,572.06				162,572.06
Student Loans	55,959.84	1,742.00	41.60		57,743.44
Special Maintenance	10,000.00				10,000.00
Funds Functioning Temporarily as Endowments	\$ 7,119,591.88	\$110,741.64	\$17,006.09	\$27,543.57	\$ 7,219,796.04
Funds Subject to Living Trusts	116,867.41	6,160.00	2,967.53	276.67	125,718.27
Funds Subject to Annuity Agreements	279,552.67	52,500.55	1,456.69		333,509.91
Trust Funds, Principal Held by Others	37,374.69		-22.87		37,351.82
	1,128,381.12				1,128,381.12
Total Restricted Endowments	\$ 8,681,767.77	\$169,402.19	\$21,407.44	\$27,820.24	\$ 8,844,757.16
Total Endowments	\$30,126,005.62	\$489,351.23	\$21,407.44	\$ 267.67	\$30,636,487.62
Gifts of Plant	8,714,811.42				8,714,811.42
Total Endowments, Special Funds, and Gifts of Plant	\$38,840,817.04	\$489,351.23	\$21,407.44	\$ 278.87	\$39,351,299.04

RESTRICTED ENDOWMENTS, CHANGES IN PRINCIPAL AND INCOME, FOR YEAR ENDED AUGUST 31, 1943

	PRINCIPAL		INCOME		Income to Principal
	Balance Aug. 31, 1913	Donors Increase	Decreases	Balance Aug. 31, 1943	Current Income
Scholarships and Fellowships					
American Society of Civil Engineers, Scholarship	\$ 6,894.08			\$ 323.00	\$ 275.76
Baldwin, George Porter (Foundation), Scholarship	25,000.00			333.33	1,000.00
Bowman, Guy C., Scholarship	10,039.54			264.90	\$ 399.00
Brown, Charlotte Black (Memorial), Scholarship	10,000.00			966.67	400.00
Buckel, C. Annette (Foundation), Scholarship and Fellowship	3,718.50			15.25	148.74
Byrne, Margaret, Scholarship	25,000.00			33.50	1,070.00
Carson, Willia W. Scholarship	50,000.00			25.01	2,133.33
Clark, L. W., Scholarship	5,000.00			1,643.94	200.00
Converse, E. C., Scholarship	50,000.00			113.14	2,000.00
Cory, Mabel Hyde, Scholarship	10,000.00			580.73	304.00
Crothers, George E. (Law School), Scholarship	4,150.00			688.00	250.00
Derby, Harry S. and Alice U., Scholarship	15,653.99	\$ 15,653.99			
Dickey, W. J., Scholarship	10,000.00			41.00	400.00
Dodds, Henry G., Scholarship	10,025.00			43.36	401.00
Dunn, Orrin W., Scholarship	7,500.00			-213.19	457.29
Fisk, Hiram Cornell Scholarship	5,100.00			20.91	204.00
Franklin, Edw. Curtis (Testimonial), Scholarship and Fellowship	10,116.00			203.30	404.64
Fries, Florence Hecht (in Medicine), Scholarship	5,000.00			-125.50	346.00
Gamble, George E., Scholarship	95,555.74	8,458.50	\$ 5,537.66	409.62	6,716.50
Glennie, Justitia Jane Campbell, Scholarship	8,058.66			-70.24	256.37
Haile, James D. (Memorial), Fellowship	10,000.00			460.00	400.00
Hammond, Nellie B., Fund for the Advancement of Knowledge and Fine Arts, Scholarship	13,089.90			4.94	1,042.26
Harris, Blanche, Scholarship in Law	3,000.00			142.50	120.00
Harrison, Elston M. (Memorial) Scholarship	3,000.00	3,000.00		68.00	68.00
Haesler, Carrie (in Medicine), Scholarship	6,300.00			4.84	290.00

RESTRICTED ENDOWMENTS. CHANGES IN PRINCIPAL AND INCOME—Continued

Scholarships and Fellowships (Continued)	PRINCIPAL		INCOME		Income to Principal
	Balance Aug. 31, 1943	Donors Increases	Decreases	Current Income	
Brought forward	\$ 402,201.41	\$ 27,112.49		\$ 16,151.88	\$ 18,523.76
Herrin, William F., Scholarship	4,518.00			180.72	180.00
Higley, Brodie G., Scholarship	3,000.00			120.00	120.00
Hopkins, Edw. W., Scholarship	23,309.37			1,279.37	1,082.00
Horner, Gladys E., Scholarship	18,000.00			720.00	720.00
Jacobs, Donald Porter, Research Fellowship	5,000.00			200.00	133.32
Jacoby, Melville J., Fund for Fellowships	5,158.00	3,556.00		191.26	50.00
Jordan, Eric Knight (in Geology), Fellowship	8,625.00			332.97	453.26
Lanagan Memorial Fund, Scholarship	15,615.80	2,090.00		832.91	539.00
Langford, Dr. Jessie C., Scholarship	533.00	277.50		16.32	
Lewis, Abe, Jr., Scholarship	1,000.00			40.00	
Loomis, George (in American Literature), Fellowship	20,000.00			800.00	
Michaels, Frederick Dewey, Scholarship	10,000.00			400.00	
Moore, Robert S. and Florence, Scholarship	3,000.00			120.00	
Morgan, Nathaniel Richard, Scholarship in Electrical Engineering	5,000.00	1,036.00		81.67	86.25
Mosher, Gladia D., Fund for Benefit of Women Students	7,197.94			287.92	
Moyse, Russell Albert, Scholarship	5,000.00			183.34	116.66
Muellhaupt, Oscar W. T. and Mary Strowbridge, Scholarship	5,000.00			29.00	550.00
Newell, Henry, Scholarship	229,995.41	2,493.58	843.75	853.91	9,489.00
Nicholson, Dr. Francis J., Scholarship	1,493.13			180.04	\$ 180.04
Nurses' Alumni Association, Scholarship	4,680.99			90.95	90.95
Phillips, John Pressley, Jr. (Memorial), Scholarship	2,760.46	878.78		326.88	143.00
Pressley, George J., Scholarship	11,612.48			1,031.03	94.50
Robinson, Henry M., Research Fellowship	17,500.00			3,080.04	3,000.00
Rosenberg, Abraham, Research Fellowship	100,000.00			150.00	250.00
Sandwick, Richard F. (Memorial), Scholarship	5,000.00				
Carried forward	\$ 915,200.99	\$ 37,444.35	\$ 6,652.40	\$ 36,796.67	\$ 36,450.75
					\$ 270.99

RESTRICTED ENDOWMENTS. CHANGES IN PRINCIPAL AND INCOME—Continued

	PRINCIPAL			INCOME		
	Balance Aug. 31, 1943	Donors	Increases	Balance Aug. 31, 1943	Current Income	Income to Principal
Scholarships and Fellowships (Concluded)						
Brought forward	\$ 915,200.99	\$ 37,444.35	\$ 6,652.40	\$ 14,835.33	\$ 36,796.67	\$ 36,450.75
San Francisco Regional Scholarship	5,000.00			835.54	200.00	
San Francisco Polytechnic High Scholarship	3,000.00			272.40	120.00	100.00
Seale, Jessie D. and Henry W., Scholarship	6,773.34			30.72	270.93	270.00
Senior Class Scholarship	5,195.68	1,441.81		194.26	174.22	150.00
Service Men's Scholarship	3,319.02	2,986.02				
Sloss, Leon, Scholarship	5,000.00			20.50	200.00	200.00
Sloss, Louis and Sarah, Scholarship	7,500.00			66.30	300.00	300.00
Stanford, Leland, Jr. (Memorial), Scholarship	6,000.00			—54.60	240.00	320.00
Stillman, John Maxon (Testimonial Fund), Scholarship	6,053.35		88.59	300.00	238.59	150.00
Student Aid Endowment Scholarship	475.00					88.59
Switzer Scholarship and Fellowship Endowment	172,759.06			3,884.73	6,110.36	982.36
Taylor, Palmer Wilkinson, Scholarship	2,465.35					144.22
Tolman, John Van Steen (in Geology), Scholarship	6,165.00	90.00		310.13	98.61	8,724.66
Tuition Endowment Scholarship	1,211.94			244.85	244.85	
Tuition, Los Angeles (Regional), Scholarship	3,835.21			334.01	48.48	
Vanderburgh, Stanley Wilson (Memorial), Scholarship	2,973.00	750.00	147.51	—2.18	147.51	147.51
Victor, Royall, Scholarship	134,254.58			588.55	91.92	86.00
Voorhees, Helen B. (Memorial), Scholarship	2,500.00	2,500.00			5,370.18	5,236.68
Walker, Agnes, Scholarship	12,047.00			342.30	481.88	288.00
Weiss, Ephraim and Amelia, Scholarship	28,200.00	600.00				
Weter, James Birdsall (Memorial), Scholarship	16,000.00	3,500.00		337.06	546.67	671.36
Whitaker, Frederick P., Scholarship	4,000.00	4,000.00		106.67	106.67	
Willard, Charles W., Scholarship	6,010.00	1,000.00		1,229.49	233.73	—50.00
Windt, Henry (in Chem. Engr.), Scholarship	8,500.00			403.01	340.00	
Total Scholarships and Fellowships	\$1,984,438.52	\$ 54,312.18	\$ 8,888.50	\$ 24,279.07	\$ 52,981.27	\$ 54,024.03
						\$ 507.06

Libraries	Principal			Income		
	Balance Aug. 31, 1913	Donors	Increases	Balance Aug. 31, 1913	Current Income	Income to Approp.
Baker, Albert H., for Grad. Sch. of Business Library	\$ 250.00	\$ 250.00		\$ 7.50	\$ 7.50	
Bender, Albert, Rare Book Fund	6,163.97			209.82	246.56	\$ 203.51
Branner Memorial Association Fund	12,234.52			238.75	489.38	532.32
Carr Business School Book Fund	100.00	75.00		3.17	2.75	
Chinese Library Endowment Fund	68.66		\$ 2.64		2.64	\$ 2.64
Class of 1903 Endowment for Purchase of Library Books	3,791.83				151.67	376.51
Class of 1938 Endowment for Purchase of Library Books	1,986.20			28.25	79.45	168.30
Class of 1939 Endowment for Purchase of Library Books	950.43			39.37	38.02	67.85
Coleman, S. Waldo, for Graduate Sch. of Business Library	500.00			34.89	20.00	39.51
Cubberley Memorial Library Fund	12,977.89	4,695.17	3,197.82	169.62	3,197.82	2.49
Cubberley Book Purchase Fund	50,001.67			466.04	2,000.07	1,832.01
Favre, Eugene, Memorial Shelf, Business Library	750.00	750.00		13.56	30.00	16.44
Felton, Charlotte Ashley, Memorial Library	25,000.00			389.47	1,000.00	719.39
Finnish Relief Fund, Inc.	20,000.00			392.33	800.00	1,007.39
General Library Endowments Fund	50.00			2.00	2.00	2.13
General Library for Biological Subjects	1,302.77			53.13	52.11	2.37
Ghirardelli, Domingo, Memorial Book Fund	2,000.00			5.13	80.00	106.72
Hopkins Marine Station Library Fund	24,754.24			1,934.00	990.17	465.77
Huston, Charles Andrew, Memorial Fund	2,364.01	20.00		137.26	94.21	9.92
Jewel Fund for Books, Jane Lathrop Stanford	500,000.00			1,527.76	20,000.00	20,517.29
Keast, George R., for Graduate Sch. of Business Library	7,500.00	1,500.00		521.34	255.00	41.96
Law Book Fund, 1911 J.D. Class	996.47	7.50		125.83	39.61	10.84
Library Endowment, Special	465,411.56		6,573.03	1,191.30	18,301.82	17,110.52
Meyer, J. Henry, Endowment in Memory Antoine Borel	6,178.54			278.76	247.14	164.90
Pillsbury, E. S., Endowment for Purchase of Books	15,250.00				610.00	610.00
for Hopkins Marine Station Library						
Shedd, Solon and Jeannette Bell, Memorial	20,000.00			1,613.39	800.00	312.47
Smith, James Perrin, Lib. of Cephalopoda Mem. Endow.	1,686.33	5.00		109.36	67.37	.78
Snedden, Donald Scott, Library Fund	300.00	50.00		8.29	11.83	3.54
Siebbins, The Horatio Ward, Book Fund in Phys. Sci.	1,000.00			59.16	40.00	58.84
West, Victor J., Memorial Fund for Purchase of Books	879.60			47.77	35.18	-6.24
Total Libraries	\$1,184,448.69	\$ 7,352.67	\$ 9,773.49	\$ 9,607.25	\$ 49,892.30	\$ 44,377.53
						\$3,200.46

RESTRICTED ENDOWMENTS, CHANGES IN PRINCIPAL AND INCOME—Continued

Departmental Use	PRINCIPAL			INCOME			
	Balance Aug. 31, 1913	Donors Increases	Decreases	Balance Aug. 31, 1943	Current Income	Income Approp.	Income to Principal
Benson, Gilbert F., Endowment for Maintenance of Dudley Herbarium	\$ 2,500.00			\$ 106.50	\$ 100.00		
Byrne, Margaret, Professorship in American History	150,000.00			390.00	6,000.00	\$ 6,000.00	
Campbell, Douglas Houghton, Fund	2,095.95			14.29	83.84	75.00	
Carnegie Corporation of New York, Endowment Food Research	750,000.00			1,950.00	30,000.00	30,000.00	
Cubberley Lectureship Fund	6,005.00	\$ 1,805.00		258.54	209.05		
Dole Memorial Fund Endowment, The	2,040.85			214.00	81.63	12.77	
Duncombe, Arthur G. (Estate), School of Journalism	30,021.00			—18.27	1,200.84	1,200.84	
Eckart, William Roberts, Research Fund in Mechanical Engineering	2,259.68		\$ 38.83	48.20	88.83	50.00	\$ 38.83
Fairclough Fund	1,594.35		38.24		62.24	24.00	38.24
First Million Endowment Fund	1,000,000.00						
Fourth Million Endowment Fund	1,462.30						
Golder, Frank A., Memorial Fund Endowment (for Russian Revolution Research)	2,187.65			64.62	88.69	117.67	
Hammond, Nellie B., Fund for Advancement of Knowledge and Fine Arts	1.00						
Hardy, Irene, Prize Fund in English Verse	500.00			46.59	20.00		
Carried forward	\$ 1,950,667.78	\$ 1,805.00	\$ 77.07	\$ 3,074.47	\$ 37,935.12	\$ 37,480.28	\$ 77.07

RESTRICTED ENDOWMENTS, CHANGES IN PRINCIPAL AND INCOME—Continued

	PRINCIPAL			INCOME		
	Balance Aug. 31, 1943	Donors	Increases	Balance Aug. 31, 1943	Current Income	Income to Principal
Departmental Use (Concluded)						
Brought forward						
Herzstein, Dr. Morris, Chair of Biology Endowment	\$1,950,667.78	\$ 1,805.00	\$ 77.07	\$ 3,074.47	\$ 37,935.12	\$ 37,480.28
Japanese History and Civilization, Chair in, Endowment	100,000.00			260.00	4,000.00	4,000.00
Jordan, David Starr, Memorial Endowment	37,500.00			97.50	1,500.00	1,500.00
Lane Medical Lecture Fund	5,716.29			613.33	228.65	228.65
Langille Book Fund	20,000.00			909.09	800.00	
Nuggets Fund, in Memory of Julia Watt Lawrence	600.00			89.82	24.00	8.34
Oldroyd Shell Collection	1,000.00			75.85	40.00	18.84
Religion, School of, Endowment for	1,651.00			425.62	419.58	
Rogers, F. J. and Josephine, Fund for School of Religion	401.12				15.43	15.43
Stanford New Endowment Fund	4,233.79			223.05	223.05	179.39
Stanford, Thomas Welton, Endowment for Psychic Investigation						
				—135.61	\$27,543.57	
Stanford, Thomas Welton, Endowment for Psychology and Psychic Investigation	50,000.00			363.40	2,000.00	2,000.00
Third Million Endowment Fund	525,092.77			2,000.00	21,003.71	23,772.30
Thorpe, Allene, Bookshelf in Dean of Women's Office	364,590.40			47.43	13.52	2.71
Urmy, Clarence, Award, Student Submitting Best Poem	337.98			8.16	40.40	40.00
West, R. F., Endowment for Lectures on Immortality and Kindred Subjects	1,010.00					
	10,000.00			860.85	451.05	
Total Departmental Use	\$3,072,801.13	\$ 1,805.00	\$ —43.11	\$27,543.57	\$ 68,894.51	\$ 69,230.51
						\$ 92.50

RESTRICTED ENDOWMENTS, CHANGES IN PRINCIPAL AND INCOME—Continued

	PRINCIPAL		INCOME		Income to Principal
	Balance Aug. 31, 1943	Increases Donors	Decreases	Current Income	
Hospital and Medical School					
Barkan, Adolph, Foundation	\$ 39,817.63			\$ 1,592.71	\$ 357.86
Broderick Memorial Free-Bed Endowment Fund	4,005.00			160.20	160.20
Bryce, Peter C., Free-Bed Endowment for Obstetrics	1,000.00			40.00	40.00
Carson, William W., Care of Clinical Patients	50,000.00			2,000.00	2,000.00
Claybourne, Marion F., Endowment for Free Beds	3,927.09			157.08	157.08
Emge, L. A., Cancer Research	17,989.00	\$ 100.00		719.23	1,177.00
Faber, H. K., Free-Bed Endowment	9,471.37	1,221.00	\$ 327.78	327.78	\$ 327.78
Farnsworth Fund	791,019.72	3,247.56		53,429.27	15,495.95
Glikbarg, Emilie, Memorial Fund Endowment	2,650.00			106.00	32.00
Grateful Patients Free-Bed Endowment, The	4,473.57			178.94	178.94
Hewes, David, Free-Bed Endowment for Lane Hospital	6,000.00			240.00	240.00
Hopkins, Moses, Memorial for Hospital Beds	10,000.00			400.00	400.00
Horner, Gladys E., Cancer Research Foundation	18,000.00			720.00	1,150.81
Jane, Florence, Fund	1,000.00			40.00	
Lathrop, C. G., Free-Bed Endowment for Medical School	11,000.00			440.00	440.00
Loomis, Kate Ashley, Fund	95,000.00	35,000.00		3,616.66	975.12
Medical Research Endowment	37,815.47	74.00		1,509.91	
Nurses' Alumni Association Free-Bed Endowment, Lane Hospital	5,000.00			200.00	200.00
Rixford, Emmet, Memorial Endowment Fund, Medical Research in Surgery	3,714.75			148.59	
St. Goar, Nellie, Endowment for Medical School	455.41			18.22	
Schulte Endowment and Research Fund in Pharmacology and Therapeutics	698.69	324.73	17.83	17.83	17.83
Sharon, Flora, Endowment	200,000.00			5,979.49	5,000.00
Steiner, Doris Clayburgh, Endowment Fund	13,692.00	1,062.50		509.11	461.38
Valmira Fund	36,562.50			2,500.00	
Wilbur, E. P., Children's Free-Care Endowment	4,500.00	4,500.00		7.50	
	\$1,387,792.20	\$ 45,526.76	\$ 912.81	\$ 76,058.62	\$ 20,466.94
					\$ 346.01

Lano Library

Total Lane Library

RESTRICTED ENDOWMENTS, CHANGES IN PRINCIPAL AND INCOME—Continued

	PRINCIPAL			INCOME		
	Balance Aug. 31, 1943	Donors	Increases	Decreases	Balance Aug. 31, 1943	Current Income
Student Loans						
Davis, Horace, Student Loan Fund	\$ 10,000.00					\$ 400.00
Dobbins, John William, Encina Commons Loan Fund Endowment	16,170.00					
Frost, John Laurence, Loan Fund	25,000.00					561.34
Leighton, Susan, Memorial Fund	1,417.00					56.68
Marriot, Alice M., Loan Fund	2,332.84					93.31
Meyer, Louise W., Loan Fund	1,742.00	\$ 1,742.00				
Pafflow, Lulah, Memorial	1,081.60		\$ 41.60			41.60
Total Student Loans	\$ 57,743.44	\$ 1,742.00	\$ 41.60			\$ 1,152.93
						\$ 1,111.33
Maintenance						
Wagner, George and Vivian, for maintenance of the School of Education Building	\$ 10,000.00					\$ 400.00
						\$ 400.00
Funds Functioning Temporarily as Endowments						
Frost, Laurence, Amphitheater	\$ 2,244.99		\$ 86.35			\$ 86.35
Hoover Library Building Fund	907.76		34.91			34.91
Lane Library Reserve Fund (Medical)	27,324.88					1,093.00
Law School Building Fund and Endowment	11,741.32	50.00	450.31			450.31
McCoskey, Grace, Fund	50.00					
Meyer, John J. and Adele H., Loan Fund	1,005.00	1,000.00	5.00			5.00
Restoration Fund, Memorial Church Spire	5,245.17	5,110.00	135.17			135.17
Second Million Endowment Fund	4,046.22		155.62			155.62
Stanford Clinics Auxiliary and San Francisco Maternity	53,752.41		2,067.40			2,067.40
Stanford Futures Fund	18,617.75				\$ 1,102.39	744.71
West, Victor J., Memorial Fund	782.77		32.77	\$ 276.67		32.77
Total Funds Functioning Temporarily as						32.77

RESTRICTED ENDOWMENTS, CHANGES IN PRINCIPAL AND INCOME—Continued

	PRINCIPAL			INCOME		
	Balance Aug. 31, 1913	Donors	Increases	Decreases	Balance Aug. 31, 1913	Current Income
Funds Subject to Living Trusts						
Bourn, John J. and Maude E., Student Fund	\$ 55,563.61		\$ 639.55		\$ 19.61	\$ 2,650.64
Field-Hoteling Fund	30,000.00				1,301.64	1,301.64
Golder, F. A., Endowment for Educational Purposes	33,247.01	\$.55			272.37	1,442.51
Haas, Louis S., Fund for Research in Child Psychology	37,706.00		306.00		3.30	2,222.48
Holt, William A., General Endowment	50,000.00	50,000.00			197.45	1,197.45
Huston, Margaret D., Scholarship Fund	12,363.30		511.14		118.75	1,000.64
Morgan, Nathaniel Richard, Fund	1,000.00				51.42	41.84
Ryan, Harris J. and Katherine E. F.	70,890.96	2,500.00			3,043.36	3,043.36
Shedd, Solon, Estate of	37,739.13				1,214.99	1,814.99
Sykes, Catherine Whalley, Scholarship Fund	5,000.00				216.94	216.94
Total Funds Subject to Living Trusts	\$ 333,509.91	\$ 52,500.55	\$ 1,456.69		\$ 6,439.83	\$ 14,932.49
Trust Funds, Principal Held by Other Trustees						
Briggs, Ella P., Scholarship Trust	\$ 7,500.00				\$ 60.61	\$ 646.24
Briggs, Evelyn Fannie, Scholarship Trust	7,500.00				58.59	646.24
Cushing, Dr. Clinton, Free Bed	37,500.00				11,117.73	1,000.00
Herzstein Medical Lecture Trust Fund	10,000.00				74.76	
Hopkins, Timothy, Trust Fund	1,055,073.45				{ 7,733.88	11,933.88
Metz, Dorothy, Trust Scholarship					{ 7,471.34	4,271.34
Stanford, Leland, Jr., Memorial Trust Scholarship	4,775.00				{ -2,315.42	3,684.58
Total Trust Funds, Principal Held by Other Trustees	6,032.67				238.57	384.77
					-70.87	191.76
Total Trust Funds, Principal Held by Other Trustees	\$1,128,381.12				\$ 24,369.19	\$ 22,758.81
						\$ 20,870.00

RESTRICTED ENDOWMENTS, CHANGES IN PRINCIPAL AND INCOME—Concluded

	PRINCIPAL		INCOME		Income to Principal
	Balance Aug. 31, 1943	Donors — Increase	Decreases	Current Income	
Funds Subject to Annuity Agreements					
Anonymous	\$ 23,318.28			\$ 1,012.45	\$ 1,250.00
Wolter, Marie, Fund	14,033.54	\$ —22.87		607.63	600.00 \$ —22.87
Total Funds Subject to Annuity Agreements	\$ 37,351.82	\$ —22.87		\$ 1,620.08	\$ 1,850.00 \$ —22.87
Total Restricted Endowments	\$8,844,757.16	\$189,402.19	\$27,820.24	\$298,335.15	\$236,843.60 \$7,131.92
Gifts—Cash and other securities	\$169,402.19				
Profit and Loss security transactions				\$267,119.71	
Appropriations from Income	\$12,921.17		Income	1,111.33	\$ 1,111.33
Dividends credited direct	7,131.92		Added to Student Loan Funds	7,027.37	
Liquidation dividend nominal value stock	306.00		Direct Appropriation to Principal	22,756.81	
Profit on sale of real estate	843.75		Trust Funds	317.93	
Transfer to endowments	204.60	\$27,543.57	Other		
Payment to annuitant		276.67	Included in Income Appropriated		200,057.46
			Annuities—Trusts		6,001.81
			Principal held by others		
			Scholarships		2,080.00
			Contributions for current purposes		3,290.00
			Appropriated to Income		15,500.00
			Changed Direct		8,803.00
				\$298,335.15	\$236,843.60

ENDOWMENTS AND RESTRICTED FUNDS FOR YEAR ENDED AUGUST 31, 1943

	Aug. 31, 1942	Aug. 31, 1943
Gifts of Plant	\$ 38,273.75	\$ 38,273.75
Assembly Hall Alterations	1,306,577.57	1,306,577.57
Athletic Plant from Board of Athletic Control	18,606.00	18,606.00
Bacteriology Lecture Hall	58,393.17	58,393.17
Basketball Pavilion, from Associated Students	50,350.00	50,350.00
Books and Furniture from Levi Cooper Lane Library of Medicine and Surgery	450,000.00	450,000.00
Branner Hall from Board of Athletic Control	699.82	699.82
Clock from Class of 1931	534,305.45	534,305.45
Cubberley, Ellwood P. and Helen C., Education Building	10,000.00	10,000.00
Cubberley, Ellwood P. and Helen C., Residence, 610 Cabrillo Avenue	3,704,410.49	3,704,410.49
Educational Plant, Lands, Buildings and Equipment from Leland and Jane Lathrop Stanford	870.65	870.65
Fountain in Stanford Union Court, Gift of Class of 1922	1,000.00	1,000.00
Highway Entrance from Anonymous Donor	10,000.00	10,000.00
Highway Gates from Alumni Association	1,738.92	1,738.92
Hoover War Library, Washington, D.C.	531,891.48	531,891.48
Hoover Library on War, Revolution, and Peace	8,250.00	8,250.00
Lagunita Boat House, from Associated Students	2,477.08	2,477.08
Library Memorial Fountain		
Lane Medical Library Building and Furniture from Funds Received from Sale of Assets of the Levi Cooper Lane Library of Medicine and Surgery	150,643.92	150,643.92
Lane Medical Library Building, Sutro Room from Accumulated Earnings	14,551.05	14,551.05
Carried forward	<u>\$6,893,039.35</u>	<u>\$6,893,039.35</u>

REPORT OF THE FINANCIAL VICE-PRESIDENT

ENDOWMENTS AND RESTRICTED FUNDS—*Concluded*

<i>Gifts of Plant (Concluded)</i>	Aug. 31, 1942	Aug. 31, 1943
Brought forward	\$6,893,039.35	\$6,893,039.35
Laurence Frost Amphitheater	80,143.10	80,143.10
Loeb, Jacques, Laboratory Building from Rockefeller Foundation	105,912.42	105,912.42
Marine Biological Station Equipment from Rockefeller Foundation	4,081.08	4,081.08
Medical College Buildings and Grounds from Cooper Medical College	94,700.00	94,700.00
Medical Department and Lane Hospital Equipment from Cooper Medical College	58,962.50	58,962.50
Medical Library Lot from Levi Cooper Lane Library of Medicine and Surgery	18,633.66	18,633.66
Memorial Hall	656,714.94	656,714.94
Memorial Church, Solo Organ from Anonymous Donor	3,600.00	3,600.00
Radium from William N. Fitzhugh Funds	12,000.00	12,000.00
Roble Gymnasium from Board of Athletic Control	235,082.56	235,082.56
Ruth Lucie Stern Research Building	97,000.00	97,000.00
Ryan, Harris J., High-Voltage Laboratory and Equipment from Funds of Hydro-Power, Electrical Equipment and Other Industries	230,041.13	230,041.13
Stanford, Thomas Welton, Art Gallery from Funds Received from Thomas Welton Stanford	89,305.91	89,305.91
Stanford Union Building (new) from an Anonymous Alumnus	100,000.00	100,000.00
Stanford Union Dining Room Addition from Stanford Union	10,287.04	10,287.04
Student Hospital Fund Building and Equipment	10,807.73	10,807.73
University Library, Stacks	14,500.00	14,500.00
Total Gifts of Plant	\$8,714,811.42	\$8,714,811.42

**ANALYSIS OF INCOME AND EXPENDITURES FROM RESTRICTED ENDOWMENTS, SPECIAL FUNDS, AND CONTRIBUTIONS FOR
CURRENT PURPOSES AND SCHOLARSHIPS FOR YEAR ENDED AUGUST 31, 1943**

	Unexpended or Unappropriated Aug. 31, 1942	Income for Year Ended Aug. 31, 1943	Total	Expended for Year Included in Income	Balance Unexpended Aug. 31, 1943
Restricted Endowments	\$131,172.91	\$298,335.15	\$ 429,508.06	\$243,975.52	\$185,532.54
Special Contributions	447,101.68	428,120.74	875,222.42	384,186.54	491,035.88
Gift Scholarships	21,071.46	45,413.24	66,484.70	42,014.07	24,470.63
	<u>\$599,346.05</u>	<u>\$771,869.13</u>	<u>\$1,371,215.18</u>	<u>\$670,176.13</u>	<u>\$701,039.05</u>
		Included in Income		\$642,261.16	
		Charged Direct		6,883.67	
		To Loan Funds		1,111.33	
		To Property Reserves		5,404.86	
		To Endowment Principal		7,131.92	
		To Trust Annuities		6,001.81	
		Inter Fund Transfers		1,381.38	
				<u>\$670,176.13</u>	

INCOME AND EXPENDITURES OF SPECIAL CONTRIBUTIONS FOR CURRENT PURPOSES FOR YEAR ENDED AUGUST 31, 1943

Special Contributions

	Unexpended or Unappropriated Aug. 31, 1942	Income for Year Ended Aug. 31, 1943	Total	Expended for Year Included in Income	Balance Unexpended Aug. 31, 1943
American Children's Fund for Hoover War Library	\$ 31,902.20	\$ 3,000.00	\$ 34,902.20	\$ 981.57	\$ 33,920.63
American Medical Society for Dr. Green in Physiology	160.48		160.48		160.48
American Philosophical Society for Professor Beadle	400.00		400.00	400.00	139.42
Anonymous for History Department Books	264.42		264.42	125.00	300.00
Anonymous for Natural History Museum	300.00		300.00		400.00
Anonymous for Pension Fund		400.00	400.00		25.00
Appointment Service, Registrar's Office		25.00	25.00		5.00
Bacteriology Department, Miscellaneous Gifts		5.00	5.00		50.00
Benson, W. W., Memorial Fund		50.00	50.00		45.00
Biology Department, Miscellaneous		45.00	45.00		91.60
Biology Department, Research	91.60		91.60	91.60	40.00
Bivin Foundation, Inc., George Davis, Phychology Department, Fellow	40.00		40.00		298.28
California Division of Fish and Game for Dr. Murray Luck	165.54	6,500.00	6,665.54	6,367.26	125.54
Carnegie Corporation for Study of Gifted Children	125.54		125.54	125.54	484.58
Carnegie Corporation for Study of Psychology of Later Maturity	484.58		484.58		4,624.26
Chemistry Department, Miscellaneous Gifts	2,091.12	2,674.00	4,765.12	140.86	99.58
City Iron & Metal Co., Ryan Laboratory	99.58		99.58		498.00
Civil Engineering Department, Miscellaneous Gifts	283.00	215.00	498.00		25.00
Class of 1895	25.00		25.00		13.00
Class of 1941	13.00		13.00		5,000.00
Columbia Foundation, Liaison Committee for International Education		5,000.00	5,000.00	1,323.33	3,676.67
Co-operative Education Fund	54.23		54.23	-400.00	454.23
Council for National Defense	300.00		300.00		300.00
Dean of Men's Alumni Fund	104.00		104.00		104.00
Delta Theta Phi Law Book Fund		5.00	5.00		5.00
Dramatic Council for Drama Library	490.13	1,500.00	1,990.13	916.07	1,074.06
Dramatists' Alliance, for Various Prizes		100.00	100.00	100.00	
Dudlev Herbarium	10.00	175.00	185.00		185.00

INCOME AND EXPENDITURES OF SPECIAL CONTRIBUTIONS FOR CURRENT PURPOSES—Continued

Special Contributions (Continued)	Unexpended or Unappropriated Aug. 31, 1942	Income for Year Ended Aug. 31, 1943	Total	Expended for Year Included in Income	Balance Unexpended Aug. 31, 1943
Brought forward	\$ 37,404.42	\$ 19,694.00	\$ 57,098.42	\$ 10,171.23	\$ 46,927.19
Economics Department, Miscellaneous Gifts	256.35	60.00	316.35		316.35
Education Department Book Fund from Royalties	153.57	38.68	192.25	10.23	182.02
Education—Language Arts Education, Kefauver		212.45	212.45	128.58	83.87
Education Department, Miscellaneous Gifts	4.99	163.75	168.74	99.99	68.75
Electrical Engineering Department, Miscellaneous Gifts	1,951.02	5,445.00	7,396.02	947.00	6,449.02
Encina Hall Improvement Fund		75.00			
English Department, Miscellaneous Gifts	.49	—75.00	.49		.49
Favre, Eugene B., Memorial Library Shelf in Graduate School of Business	834.70	—750.00	84.70	84.70	
Fellowships:					
Abbott Laboratories		650.00	650.00	1,025.00	—375.00
Baughman, Ino J.	50.00		50.00		50.00
Bristol-Meyers Company, in Chemistry	2,466.67	6,250.00	8,716.67	8,000.00	716.67
Chemistry Department	200.00		200.00		200.00
Civil Engineering	55.00		55.00		55.00
Colgate-Palmolive-Peet Company	1,000.00	1,000.00	2,000.00	2,000.00	
Communication Engineering	25.00		25.00		25.00
du Pont de Nemours, I. E., in Chemistry	750.00	750.00	1,500.00	750.00	750.00
Eastman Kodak Company, in Chemistry		750.00	750.00	750.00	
Engineering Department	135.00		135.00		135.00
Ethyl Gasoline Corporation	333.34	—333.34			
Food Machinery Corporation	100.00		100.00		100.00
Gamble, Elizabeth		2,500.00	2,500.00	2,499.96	.04
Geology Department	10.00		10.00		10.00
Hicks, J. Wesley, Through Wesix Electric Heater, for Research	350.00	750.00	1,100.00	666.66	433.34
Hoover, Theodore J., in Mining and Metallurgy	61.02		61.02		61.02
Merck Co., for Hopkins Marine Station		1,500.00	1,500.00	1,375.00	125.00
Carried forward	\$ 46,141.57	\$ 38,680.54	\$ 84,822.11	\$ 28,508.35	\$ 56,313.76

INCOME AND EXPENDITURES OF SPECIAL CONTRIBUTIONS FOR CURRENT PURPOSES—Continued

Special Contributions (Continued)	Unexpended or Unappropriated Aug. 31, 1942	Income for Year Ended Aug. 31, 1943	Total	Expended for Year Included in Income	Balance Unexpended Aug. 31, 1943
Brought forward	\$ 46,141.57	\$ 38,680.54	\$ 84,822.11	\$ 28,508.35	\$ 56,313.76
Fellowships (Concluded)					
Lever Bros., Soap Fellowship		2,000.00	2,000.00	2,000.00	
Master Brewers Corporation		1,250.00	1,250.00	1,250.00	
Mechanical Engineering	25.00		25.00		25.00
Nutrition Foundation, Inc., The, in Biology	4,549.72	6,000.00	10,549.72	6,037.74	4,511.98
Ryan, Mrs. H. J., in High-Voltage Research	1,000.00		1,000.00		1,000.00
Safeway Stores, in Refrigeration	1,000.00	-200.00	800.00	800.00	
Shell Oil Company, Research in Chemistry	1,100.01	900.00	2,000.01	1,200.00	800.01
Shell Oil Company, in Mining Engineering		400.00	400.00	400.00	
Smith, J. P., Memorial Fellowship	50.00		50.00		50.00
Standard Oil Company, in Engineering	340.00	-200.00	140.00		140.00
Standard Oil Company, in Geology	800.00		800.00		800.00
Steiner, Doris Clayburgh, in English	1,010.00	1,100.00	2,110.00	1,000.00	1,110.00
Westinghouse Electric Manufacturing Company	-333.30	1,333.30	1,000.00	1,000.00	
Ferris, Dr. G. F., for Natural History Museum Publications	101.40		101.40		101.40
Finnish Relief Fund, Inc.	1,000.00	1,000.00	2,000.00	999.92	1,000.08
Fluid Research Campus, Rockefeller Foundation	584.56	5,383.59	5,968.15	4,242.21	1,725.94
Fund for Research, Publication, and Dissemination of Information upon the Problems of Lasting Peace					
Food Research Institute	-900.00	36,175.00	35,275.00	35,275.00	
Gamble, Elizabeth, for Psychology Research	242.81	350.00	350.00		350.00
General Education Board for Investigation in Social Education	2,639.71	15,000.00	17,639.71	14,340.44	3,299.27
General Education Board for Language Arts Investigation	306.77		306.77		306.77
General Electric Company, for Salary		6,000.00	6,000.00	7,333.32	-1,333.32
	440.54	949.00	710.54	119.64	222.90

INCOME AND EXPENDITURES OF SPECIAL CONTRIBUTIONS FOR CURRENT PURPOSES—(Continued)

Special Contributions (Continued)	Unexpended or Unappropriated Aug. 31, 1943	Income for Year Ended Aug. 31, 1943	Total	Expended for Year Included in Income	Balance Unexpended Aug. 31, 1943
Brought forward	\$ 60,442.48	\$ 115,729.43	\$ 176,171.91	\$ 104,605.79	\$ 71,566.12
Graduate School of Business, Miscellaneous Gifts	319.00	{ -319.00 }	297.00		297.00
Graduate School of Business for Survey of Organization of Management	6,510.31		6,510.31	6,510.31	
Graduate School of Business, Survey of Merchandising Costs in Utah	1,741.45		1,741.45	1,741.45	
Graphic Arts, Miscellaneous Gifts		10.00	10.00		10.00
History Department, Miscellaneous Gifts	92.00	788.25	880.25	191.90	688.35
Hoover War Library, Inter American Affairs		900.00	900.00	451.64	448.36
Hoover War Library, Pan American Section	54.42	3,754.42	3,754.42	4,784.91	-1,030.49
Hoover War Library, Publication Fund	11,626.76	4,500.00	16,126.76	4,707.09	11,419.67
Hoover War Library for Purchase of Books		1,600.00	1,600.00		1,600.00
Hopkins Marine Station, Miscellaneous Gifts		25.00	25.00		25.00
Hospital:					
Abbott Laboratory to Dr. Kulchar for Dermatology	82.39		82.39	11.51	70.88
Alcohol Research Fund	1,104.72	1,500.00	2,604.72	931.51	1,673.21
American Foundation for Tropical Medicine Fund		2,400.00	2,400.00	180.13	2,219.87
American Medical Association to Dr. Tainter for Research	87.31		87.31	87.31	
American Public Health Association, Whooping Cough Research	407.39		407.39	407.39	
Anonymous Gifts, Miscellaneous	30.00		30.00		30.00
Emergency Pediatric Fund	75.00		75.00		75.00
Special Surgical Equipment	15.00		15.00		15.00
Surgical Free Beds	173.76		173.76	588.58	-414.82
Pharmacology Research	5,598.80	5,000.00	10,598.80	4,737.31	5,861.49
Research in Diabetes	378.35		378.35	95.11	283.24
Cancer Statistics Fund	235.59		235.59	30.00	205.59
Dr. Jameson	500.00		500.00	-125.00	625.00
Dr. Wyckoff	1,159.38		1,159.38	336.18	823.20
Physical Therapy	15.00		15.00		15.00
Carried forward	\$ 90,649.11	\$ 136,130.68	\$ 226,779.79	\$ 130,273.12	\$ 96,506.67

INCOME AND EXPENDITURES OF SPECIAL CONTRIBUTIONS FOR CURRENT PURPOSES—Continued

Special Contributions (Continued)	Unexpended or Unappropriated Aug. 31, 1942	Income for Year Ended Aug. 31, 1943	Total	Expended for Year Included in Income	Balance Unexpended Aug. 31, 1943
Brought forward	\$ 90,649.11	\$ 136,130.68	\$ 226,779.79	\$ 130,273.12	\$ 96,506.67
Hospital (Continued)					
Barkan, Dr. Adolph, for Reference Library at San Francisco	75.34		75.34	37.00	38.34
Hospital under Eloesser and Barnett	—9.68		—9.68	436.30	—445.98
Barkan, Dr. Hans, Ophthalmology Salaries	5,745.51		5,745.51		5,745.51
Bishop, Mr. and Mrs. Roy N., for Dr. Addis in Fluid Research	10.00		10.00		10.00
Dr. Bloomfield Free Beds in Memory of Dr. Sol Hyman	15.00		15.00		15.00
Bone and Joint Free Bed	1.30		1.30	.55	.75
Bonestell, Mrs. Cutter, for Patient Transportation	115.00		115.00		115.00
Borley Ophthalmology Fund	172.77		172.77	172.77	
Breon Research Fund in Pharmacology	200.00		200.00	50.00	150.00
Bright's Disease, Miscellaneous Gifts		4,000.00	4,000.00	4,000.00	
Briggs, Wallace A., Free Bed Fund		100.00	100.00		100.00
Brodie, Infantile Paralysis Fund		260.00	335.00	—150.00	485.00
Brown, Dr. George, for Dr. Holman in Surgery	75.00		75.00		75.00
Cardiology Department Fund for Dr. Lewis	100.00		100.00		100.00
Child Guidance, Miscellaneous Gifts		100.00	100.00	37.00	63.00
Children's Free Bed Fund		17.00	17.00	2.00	15.00
Commonwealth Fund					
Community Chest Convalescent Care Fund	886.42	8,160.00	9,046.42	8,160.00	886.42
Crippled Children's Fund	615.25		615.25	547.78	67.47
Department of Medicine Free Bed Fund	2,036.74	1,125.00	3,161.74	1,140.30	2,021.44
Eckart, Mrs. Kate L., for Dr. Brophy in Surgery	357.62		357.62		357.62
Ellerbrook, George L., for Medical School	—119.00		—119.00	—90.47	—28.53
Dr. Eloesser, Free Beds for	7.70		7.70		7.70
Elwell Ultra-Violet Equipment Fund	1,301.20	100.00	1,401.20	421.00	980.20
Emergency Cancer Research Fund for Dr. Emge	—10.00		—10.00		—10.00
Eye Free Beds	6,905.48	245.00	7,150.48		7,150.48
	42.15	35.00	77.15		77.15
Carried forward	\$ 109,172.91	\$ 150,272.68	\$ 259,445.59	\$ 145,037.35	\$ 114,408.24

INCOME AND EXPENDITURES OF SPECIAL CONTRIBUTIONS FOR CURRENT PURPOSES—Continued

Special Contributions (Continued)	Unexpended or Unappropriated Aug. 31, 1942	Income for Year Ended Aug. 31, 1943	Total	Expended for Year Included in Income	Balance Unexpended Aug. 31, 1943
Brought forward	\$109,172.91	\$150,272.68	\$259,445.59	\$145,037.35	\$114,408.24
Hospital Continued)					
Dr. Fender for Research Equipment	10.00		10.00		10.00
Fisher, Mrs. Arthur, for Clinic in X-Ray Department	50.00		50.00		50.00
Friedsam Foundation, Inc., for Drs. Preston, Faber and Johnson	.85		.85		.85
Fuller, W. P. J. Child Guidance Clinic	—25.00		—25.00		—25.00
Gallenkamp, Annette, Free Beds	—38.08		—38.08	—38.08	
Gamble, Walter for Hubbard Tank in Physical Therapy Department	7.68		7.68		7.68
Gerbode, Mr. and Mrs. F. L. A., Poliomyelitis and Free Beds	729.89		729.89		729.89
Gynecology Free Bed Fund	28.00		28.00		28.00
Hart, Dr. George D., for General Medical Research	100.00		100.00		100.00
Haslett, Mrs. S. M., for Joan Howell Free Bed		100.00	100.00	50.00	50.00
Howard, N. J., Research in Department of Surgery	100.00		100.00		100.00
Hunnicut, Dr. L., Study of Lesions in Nose and Throat	75.00		75.00		75.00
Institute of Industrial Hygiene, from Various Industries	15,355.88		15,355.88		15,355.88
Irwin, W. G., Charity Foundation for Dr. Fender	498.02		498.02	466.06	31.96
Kinney, Ethie and Enid Research Fund	5,277.34	3,000.00	8,277.34		8,277.34
Lane Medical Library Fund	48.00		48.00		48.00
Lilly, Eli & Company, for Dr. Chaney	660.00		660.00	660.00	
McDonnell, J. W., Equipment Fund	90.00		90.00		90.00
Mr. Martin and Dr. Schilling, Free Beds for Dr. Newell in Division of Radiology	918.40		918.40		918.40
Medical School, Miscellaneous Gifts	6,278.25	5,683.50	11,961.75		11,961.75
Medical School, Special Fund for Dean	—548.02		—548.02		—548.02
Medical Free Bed Fund		5.00	5.00		5.00
Medical Progress Fund		2,005.00	2,005.00		2,005.00
Medical School Building Maintenance, Repairs or Additions		700.00	700.00		700.00
Mehrtens, Dr. H. G., Neuropsychiatric Free Bed Fund	—62.06	5.00	—57.06		—57.06
Carried forward	\$138,727.06	\$161,771.18	\$300,498.24	\$146,175.33	\$154,322.91

INCOME AND EXPENDITURES OF SPECIAL CONTRIBUTIONS FOR CURRENT PURPOSES—Continued

Special Contributions (Continued)		Unexpended or Unappropriated Aug. 31, 1942	Income for Year Ended Aug. 31, 1943	Total	Expended for Year Included in Income	Balance Unexpended Aug. 31, 1943
Brought forward		\$138,727.06	\$161,771.18	\$300,498.24	\$146,175.33	\$154,322.91
Hospital (Continued)						
Meininger Dermatology Fund		99.50		99.50	1.16	98.34
Michelson Research Fund		2,967.01		2,967.01		2,967.01
Miller, Dr. J. J., Whooping Cough Research		47.91		47.91	26.76	21.15
Miscellaneous Current Gifts		515.12		515.12		515.12
Miscellaneous Current Gifts, Cashier's Window		49.81		49.81		49.81
Miscellaneous Current Gifts, Free Beds		10.00		10.00		10.00
Mills, Dorothy and Gwladys, Pediatric Free Beds for Dr. Faber			300.00	300.00		300.00
National Academy of Sciences to Dr. Eric Liljencrantz for C.A.A. Pilot Research		65.93		65.93		65.93
National Research Council for Sex Research under Dr. Fluhmann		20.00		20.00		20.00
Neurology Free Beds		80.00	210.00	290.00		290.00
Neuro-Surgical Fund for Dr. Morrissey		120.00		120.00		120.00
Neuropsychiatry Special Fund for Dr. Johnson		100.00		100.00	31.96	68.04
Obstetrical Free Bed Fund		29.37	365.00	394.37	1.08	393.29
Obstetrics and Gynecology, Miscellaneous Gifts		847.19		847.19		847.19
Ophthalmology Department, Miscellaneous Gifts		300.00	25.00	325.00	29.25	295.75
Orthopedic Free Beds		20.32		20.32		20.32
Pathology Department, Miscellaneous Gifts		221.00		221.00		221.00
Pediatrics, Department of		531.04	1,028.50	1,559.54	659.80	899.74
Plots, Ella Sachs Foundation, Obesity Fund		170.77		170.77	248.09	-77.32
Polio myelitis Free Beds, President's Birthday Ball		405.36		405.36	64.33	341.03
Polio myelitis Research Fund for Dr. Faber from National Foundation for Infantile Paralysis		3,675.67	9,643.18	13,318.85	10,385.38	2,933.47
Post-Graduate Fund, Dr. Bacher		133.29		133.29		133.29
Post-Graduate Fund, Dr. Dutton		114.49		114.49	122.45	-7.96

INCOME AND EXPENDITURES OF SPECIAL CONTRIBUTIONS FOR CURRENT PURPOSES—Continued

Special Contributions (Continued)	Unexpended or Unappropriated Aug. 31, 1942	Income for Year Ended Aug. 31, 1943	Total	Expended for Year Included in Income	Balance Unexpended Aug. 31, 1943
Brought forward	\$109,172.91	\$150,272.68	\$259,445.59	\$145,037.35	\$114,408.24
Hospital (Continued)					
Dr. Fender for Research Equipment	10.00		10.00		10.00
Fisher, Mrs. Arthur, for Clinic in X-Ray Department	50.00		50.00		50.00
Friedsam Foundation, Inc., for Drs. Preston, Faber and Johnson	.85		.85		.85
Fuller, W. P., Jr., Child Guidance Clinic	—25.00		—25.00		—25.00
Gallenkamp, Annette, Free Beds	—38.08		—38.08	—38.08	
Gamble, Walter, for Hubbard Tank in Physical Therapy Department	7.68		7.68		7.68
Gerbode, Mr. and Mrs. F. L. A., Poliomyelitis and Free Beds	729.89		729.89		729.89
Gynecology Free Bed Fund	28.00		28.00		28.00
Hart, Dr. George D., for General Medical Research	100.00		100.00		100.00
Haslett, Mrs. S. M., for Joan Howell Free Bed		100.00	100.00	50.00	50.00
Howard, N. J., Research in Department of Surgery	100.00		100.00		100.00
Hunnicut, Dr. L., Study of Lesions in Nose and Throat	75.00		75.00		75.00
Institute of Industrial Hygiene, from Various Industries	15,355.88		15,355.88		15,355.88
Irwin, W. G., Charity Foundation for Dr. Fender	498.02		498.02	466.06	31.96
Kinney, Ethie and Enid Research Fund	5,277.34	3,000.00	8,277.34		8,277.34
Lane Medical Library Fund	48.00		48.00		48.00
Lilly, Eli & Company, for Dr. Chaney	660.00		660.00	660.00	
McDonnell, J. W., Equipment Fund	90.00		90.00		90.00
Mr. Martin and Dr. Schilling, Free Beds for Dr. Newell in Division of Radiology					
Medical School, Miscellaneous Gifts	918.40		918.40		918.40
Medical School, Special Fund for Dean	6,278.25	5,683.50	11,961.75		11,961.75
Medical Free Bed Fund	—548.02		—548.02		—548.02
Medical Progress Fund		5.00	5.00		5.00
Medical School Building Maintenance, Repairs or Additions		2,005.00	2,005.00		2,005.00
Mehrtens, Dr. H. G., Neuropsychiatric Free Bed Fund		700.00	700.00		700.00
	—62.06	5.00	—57.06		—57.06
Carried forward	\$138,727.06	\$161,771.18	\$300,498.24	\$146,175.33	\$154,322.91

INCOME AND EXPENDITURES OF SPECIAL CONTRIBUTIONS FOR CURRENT PURPOSES—Continued

Special Contributions (Continued)	Unexpended or Unappropriated Aug. 31, 1942	Income for Year Ended Aug. 31, 1943	Total	Expended for Year Included in Income	Balance Unexpended Aug. 31, 1943
Brought forward	\$162,085.10	\$203,726.34	\$365,811.44	\$190,964.76	\$174,846.68
<i>Hospital (Concluded)</i>					
U.S. Public Health Service, Dr. Barnett	68.66		68.66		68.66
Urology Department, Special Fund	245.78	50.00	295.78	.49	295.29
Walter Lawler, Leukemia Fund	5,000.00	67.00	5,067.00	388.62	4,678.38
Warren, Lois Gordon, Fund	338.00		338.00		338.00
Wilbur Vitamin Fund		200.00	200.00	135.10	64.90
Wilson, Mrs. R. R., for Surgery	2,500.00		2,500.00		2,500.00
Wolfsohn, Julian, Memorial Fund		614.00	614.00		614.00
Institute of American History		10,500.00	10,500.00	2,450.98	8,049.02
Institute of Pacific Relations	10.14		10.14		10.14
International Education Commission		7,500.00	7,500.00	4,668.39	2,831.61
International Standard Electric Corporation for Telephone and Telegraph Projects	389.33	2,500.00	2,889.33	2,967.59	-78.26
International Standard Electric Corporation for Electrical Engineering Research	7,938.62	2,000.00	9,938.62		9,938.62
Ishii, Noboru, Memorial Fund	50.00		50.00		50.00
Jordan Library of Ichthyology	75.00		75.00		75.00
Journalism, Miscellaneous Gifts		18.00	18.00		18.00
Kinney Neurological Research	225.00		225.00		225.00
Kleiser, G. W. for Industrial Relations	2,500.00	7,500.00	10,000.00	7,500.00	2,500.00
Lagodzinske, Louis, for Engineering Library Books	100.00		100.00		100.00
Lane Medical Library Miscellaneous Gifts, Books		3,570.00	3,570.00		3,570.00
Law Department, Miscellaneous Gifts	1,238.75	1,206.50	2,445.25		2,445.25
Library, Miscellaneous Gifts		795.57	795.57		795.57
Library Books, Miscellaneous Gifts	2.00	31.00	33.00		33.00
Markle, John and Mary R., Foundation	334.37	1,400.00	1,734.37	1,954.97	-220.60

INCOME AND EXPENDITURES OF SPECIAL CONTRIBUTIONS FOR CURRENT PURPOSES—Continued

Special Contributions (Continued)	Unexpended or Vested Fund Aug. 31, 1942	Income for Year Ended Aug. 31, 1943	Total	Expended for Year Ended Aug. 31, 1943	Balance Unexpended Aug. 31, 1943
Brought forward					
Mathematics Department, Miscellaneous Gifts		60.00	\$424,779.16	\$211,030.90	\$213,748.26
Mechanical Engineering Department, Miscellaneous Gifts	94.45	637.50	731.95	387.86	60.00
Memorial Fund at Stanford		80.50	80.50		344.09
Menlo School and Junior College for Education Department Salaries		1,000.00	1,000.00	1,000.00	80.50
Milbank, Jeremiah, Fund for Hoover War Library	1,730.04	—1,000.00	730.04	347.77	382.27
Miller, C. O. C., for Study of the Purchasing Power of Gold	1,980.58		1,980.58		1,980.58
Miller Fund for Research in Educational Guidance		273.00	273.00	273.00	
Mining Engineering, Miscellaneous Gifts	32.46	25.00	57.46	18.41	39.05
Music Department, Miscellaneous Gifts	5.00	3,190.00	3,195.00	3,098.24	96.76
National Foundation for Infantile Paralysis, Inc., for Professor Loring in Chemistry	—27.55	7,300.00	7,272.45	573.75	6,698.70
National Foundation for Infantile Paralysis, Inc., for Physical Therapy Student Training		21,340.00	21,340.00	9,996.75	11,343.25
Natural History Museum	66.00	5.00	71.00		71.00
Natural History Museum for South American Fish Specimens	50.00		50.00		50.00
Nutrition and Dietetics, School of Health, Women		50.00	50.00	50.00	
Nutrition Foundation, Inc., for Research by Dr. Luck		3,500.00	3,500.00	1,225.33	2,274.67
Pacific Electric Manufacturing Corporation, for Ryan Laboratory	500.00		500.00		500.00
Pacific Gas and Electric Co., for Ryan Laboratory	500.00		500.00		500.00
Pacific Islands Research, Biological Sciences	1,544.38	10,200.00	11,744.38	6,651.20	5,093.18
Pahl, A. J. and K. P. F., Electric Company, for Ryan High-Voltage Laboratory	50.00	50.00	100.00		100.00
Photo-Chemical Research Conference, for Chemistry	283.07		283.07		283.07
Physical Sciences Department, Miscellaneous Gifts		100.00	100.00		100.00
Physics Department, Miscellaneous Gifts		10.00	10.00		10.00
Physiology Department, Miscellaneous Gifts		10.00	10.00		10.00
Carried forward	\$189,909.18	\$288,509.41	\$478,418.59	\$234,653.21	\$243,765.38

INCOME AND EXPENDITURES OF SPECIAL CONTRIBUTIONS FOR CURRENT PURPOSES—Continued

Special Contributions (Continued)	Unexpended or Unappropriated Aug. 31, 1942	Income for Year Ended Aug. 31, 1943	Total	Expended for Year Included in Income	Balance Unexpended Aug. 31, 1943
Brought forward	\$162,085.10	\$203,726.34	\$365,811.44	\$190,964.76	\$174,846.68
Hospital					
<i>Concluded</i>					
U.S. Public Health Service, Dr. Barnett	68.66		68.66		68.66
Urology Department, Special Fund	245.78	50.00	295.78	.49	295.29
Walter, Lawler, Leukemia Fund	5,000.00	67.00	5,067.00	388.62	4,678.38
Warren, Lois Gordon, Fund	338.00		338.00		338.00
Wilbur Vitamin Fund		200.00	200.00	135.10	64.90
Wilson, Mrs. R. R., for Surgery	2,500.00		2,500.00		2,500.00
Wolfsohn, Julian, Memorial Fund		614.00	614.00		614.00
Institute of American History		10,500.00	10,500.00	2,450.98	8,049.02
Institute of Pacific Relations	10.14		10.14		10.14
International Education Commission		7,500.00	7,500.00	4,668.39	2,831.61
International Standard Electric Corporation for Telephone and Telegraph Projects	389.33	2,500.00	2,889.33	2,967.59	—78.26
International Standard Electric Corporation for Electrical Engineering Research	7,938.62	2,000.00	9,938.62		9,938.62
Ishii, Noboru, Memorial Fund	50.00		50.00		50.00
Jordan Library of Ichthyology	75.00		75.00		75.00
Journalism, Miscellaneous Gifts		18.00	18.00		18.00
Kinney Neurological Research	225.00		225.00		225.00
Kleiser, G. W. for Industrial Relations	2,500.00	7,500.00	10,000.00	7,500.00	2,500.00
Lagodzinske, Louis, for Engineering Library Books	100.00		100.00		100.00
Lane Medical Library, Miscellaneous Gifts, Books		3,570.00	3,570.00		3,570.00
Law Department, Miscellaneous Gifts	1,238.75	1,206.50	2,445.25		2,445.25
Library, Miscellaneous Gifts		795.57	795.57		795.57
Library Books, Miscellaneous Gifts	2.00	31.00	33.00		33.00
Markle, John and Mary R., Foundation	334.37	1,400.00	1,734.37	1,954.97	—220.60
Carried forward	\$183,100.75	\$241,678.41	\$424,779.16	\$211,030.90	\$213,748.26

INCOME AND EXPENDITURES OF SPECIAL CONTRIBUTIONS FOR CURRENT PURPOSES—Concluded

Special Contributions (Continued)	Unexpended or Unappropriated Aug. 31, 1942	Income for Year Ended Aug. 31, 1943	Total	Expended for Year Included in Income	Balance Unexpended Aug. 31, 1943
Brought forward					\$451,726.72
School of Engineering, Miscellaneous Gifts	\$415,766.09	\$365,839.15	\$781,605.24	\$329,878.52	3,125.28
School of Health (Men), Miscellaneous Gifts	2,473.50	1,334.00	3,807.50	682.22	46.96
School of Health (Women), Miscellaneous Gifts	98.42	56.00	154.42	107.46	35.44
School of Humanities	8,911.00	205.00	205.00	169.56	3,461.03
School of Letters, Miscellaneous Gifts	71.31	—3,120.25	5,790.75	2,329.72	1,500.00
School of Public Service			71.31	71.31	5.00
School of Religion		1,500.00	1,500.00		110.25
School of Social Sciences	34.25	5.00	5.00		178.50
School of Speech and Drama	92.30	76.00	110.25		100.00
Snedden, Dr. and Mrs. David, for Donald Scott Snedden Library Fund	50.00	86.20	178.50		159.87
Social Science Research Council for Dr. Barker		50.00	100.00		608.77
Social Science Research Council for Dr. Strong		350.00	350.00	190.13	—3,648.65
Sperry Gyroscope Company for Measurement of Micro-Wave Radio	608.77	851.31	851.31	851.31	2,000.00
Sperry Gyroscope Company for Micro-Wave No. 2	—2,064.34	9,900.00	7,835.66	11,484.31	9,006.15
Stanford Associates for Publication Expense		2,000.00	2,000.00		25.00
Stanford Nursery School for Salaries		100.00	100.00	100.00	500.00
Stanford Futures Fund		9,006.15	9,006.15		100.00
Stanford "R" Plan Luncheon, Unrestricted		25.00	25.00		450.00
Therapeutic Research by Dr. Luck		500.00	500.00		16,788.15
Dr. Timoshenko for Applied Mechanics		200.00	200.00		1,651.46
Dr. Tresidder's Office		100.00	100.00	200.00	722.40
United Airlines Research, Air Aviation Education		525.00	525.00		133.55
Unrestricted Gifts, Anonymous	15,739.52	37,166.13	51,888.15	75.00	2,250.00
Vibration Research Fund for the School of Engineers	1,652.35	—1,017.50	1,652.35	35,100.00	
Wallace Gifted Children Fund, The	3,668.51		3,668.51	2,946.11	
Wilbur, Ray Lyman, Collection on Social Problems		133.55	133.55		
Anonymous Fund		2,250.00	2,250.00		
Total Special Contributions	\$447,101.98	\$428,120.74	\$875,222.42	\$384,186.54	\$491,035.88

INCOME AND EXPENDITURES OF SPECIAL CONTRIBUTIONS FOR SCHOLARSHIPS FOR YEAR ENDED AUGUST 31, 1943

Gift Scholarships	Unexpended or Unappropriated Aug. 31, 1942	Income for Year Ended Aug. 31, 1943	Total	Expended for Year Included in Income	Balance Unexpended Aug. 31, 1943
Alumni Association for Entering Undergraduates					
American Legion Scholarship	\$ 110.00	\$ 300.00	\$ 410.00	\$ 390.00	\$ 20.00
Anonymous Scholarships	1,419.68	429.00	429.00	286.00	143.00
Bacon, Edward R.		4,011.00	5,430.68	3,273.50	2,157.18
Borders, Harry L., in Law		5,000.00	5,000.00	4,578.00	422.00
Buck of the Month Fund	390.00		390.00		390.00
Cap and Gown	130.00	{ 1,940.00 }	895.00		895.00
Chicago Stanford Club	230.00	{ -1,175.00 }	575.00	690.00	-115.00
Class of 1924		345.00	780.00	650.00	130.00
Class of 1933	672.28	97.47	769.75		769.75
Class of 1935	102.50		102.50		102.50
Class of 1937	68.40		68.40		68.40
Collins, Robert Earl, Dimes for Diplomas	10.00		10.00		10.00
Colonial Dames		158.50	158.50		158.50
Commercial Credit Company		100.00	100.00	100.00	
Crothers, George E., Law	.02	1,000.00	1,000.02	820.00	180.02
Davidson, Helen P., in Psychology	40.42		40.42		40.42
Departmental Scholarships:	100.00		100.00		100.00
Biology	7.50		7.50		7.50
Chemistry	62.00		62.00		62.00
Economics	11.00		11.00		11.00
Education	77.00		77.00		77.00
Engineering					
Civil	65.00		65.00		65.00
Communication	35.00		35.00		35.00
General	297.50		297.50	120.00	177.50
Mechanical	25.00		25.00		25.00
Mining	5.00		5.00		5.00
English	10.00		10.00		10.00

Special Contributions (Continued)					
	Unexpended or Unappropriated Aug. 31, 1942	Income for Year Ended Aug. 31, 1943	Total	Expended for Year Included in Income	Balance Unexpended Aug. 31, 1943
Brought forward			\$781,605.24	\$329,878.52	\$451,726.72
School of Engineering, Miscellaneous Gifts	\$415,766.09	\$365,839.15	3,807.50	682.22	3,125.28
School of Health (Men), Miscellaneous Gifts	2,473.50	1,334.00	154.42	107.46	46.96
School of Health (Women), Miscellaneous Gifts	98.42	56.00	205.00	169.56	35.44
School of Humanities	8,911.00	-3,120.25	5,790.75	2,329.72	3,461.03
School of Letters, Miscellaneous Gifts	71.31		71.31	71.31	
School of Public Service		1,500.00	1,500.00		1,500.00
School of Religion		5.00	5.00		5.00
School of Social Sciences	34.25	76.00	110.25		110.25
School of Speech and Drama	92.30	86.20	178.50		178.50
Snedden, Dr. and Mrs. David, for Donald Scott Snedden Library Fund	50.00	50.00	100.00		100.00
Social Science Research Council for Dr. Barker		350.00	350.00	190.13	159.87
Social Science Research Council for Dr. Strong		851.31	851.31	851.31	
Sperry Gyroscope Company for Measurement of Micro-Wave Radio	608.77		608.77		608.77
Sperry Gyroscope Company for Micro-Wave No. 2	-2,064.34	9,900.00	7,835.66	11,484.31	-3,648.65
Stanford Associates for Publication Expense		2,000.00	2,000.00		2,000.00
Stanford Nursery School for Salaries		100.00	100.00	100.00	
Stanford Futures Fund		9,006.15	9,006.15		9,006.15
Stanford "R" Plan Luncheon, Unrestricted		25.00	25.00		25.00
Therapeutic Research by Dr. Luck		500.00	500.00		500.00
Dr. Timoshenko for Applied Mechanics		200.00	200.00	200.00	
Dr. Tresidder's Office		100.00	100.00		100.00
United Airlines Research, Air Aviation Education		525.00	525.00	75.00	450.00
Unrestricted Gifts, Anonymous	15,739.52	37,166.13	51,888.15	35,100.00	16,788.15
Vibration Research Fund for the School of Engineers	1,652.35	-1,017.50	1,652.35	.89	1,651.46
Wallace Gifted Children Fund, The	3,668.51		3,668.51	2,946.11	722.40
Wilbur, Ray Lyman, Collection on Social Problems		133.55	133.55		133.55
Anonymous Fund		2,250.00	2,250.00		2,250.00
Total Special Contributions	\$447,101.68	\$428,120.74	\$875,222.42	\$384,186.54	\$491,035.88

STUDENT LOAN FUNDS—Continued

Loan Funds (Continued)	Invested in Fund Aug. 31, 1942	Additions to Fund during Year	Invested in Fund Aug. 31, 1943	Outstanding Loans Aug. 31, 1942	Loans Made during 1942-43	Loans Repaid during 1942-43	Outstanding Loans Aug. 31, 1943	Balance Available for Loans Aug. 31, 1943	No. of Loans Paid during 1942-43	No. of Loans Outstanding Aug. 31, 1943
Brought forward	\$ 59,108.46	\$ 6,392.11	\$ 65,500.57	\$ 32,780.33	\$ 6,321.80	\$ 11,639.32	\$ 27,503.87	\$ 37,996.70	92	181
Engineering Loan Fund	1,306.74	{ 100.00 } 7.65	1,414.39	100.00		100.00		1,414.39	1	1
Farrand, George E.	6,312.02	359.18	6,671.20	4,249.25	571.90	1,492.90	3,328.25	3,342.95	4	14
Friedlander, Richard, Memorial	2,008.99	68.82	2,077.81	1,219.00		375.00	844.00	1,233.81	4	4
Frost, John Laurence	13,923.93	{ 207.99 } { 1,000.00 } 561.34	15,693.26	10,896.93		2,469.47	8,427.46	7,265.80	17	17
Geology Honor	1,594.53	18.83	1,613.36	381.00		131.00	250.00	1,363.36	2	2
Hammond, Nellie B.	728.99	114.89	843.88	554.00		256.00	298.00	545.88	4	4
Harkey, Catherine, Memorial	686.63	-4.73	681.90	421.00	189.50	493.50	117.00	564.90	2	6
Huston, Margaret D. and Charles A., Memorial	100.00		100.00	100.00			100.00			
Jenkins, Oliver Peebles, Memorial	517.78	5.44	523.22	245.00	130.00	115.00	260.00	263.22	1	1
Alumni Jordan Medical Scholarship	13,698.55	{ 148.15 } { 485.00 }	14,331.70	10,395.00	1,260.00	1,708.44	9,946.56	4,385.14	5	12
Kellogg Loan Fund	6,800.00	3,400.00	10,200.00	1,820.00	5,250.00	140.00	6,930.00	3,270.00	38	1
Kellogg, W. K., Foundation for Physical Therapy		4,000.00	4,000.00					4,000.00		
Kilgore, Eugene S., Memorial	408.50		408.50					408.50		
Kimball, Alice Windsor	573.04	2.10	575.14	332.25	6.94	31.94	307.25	267.89	1	2
Kistler, Jessie R.		300.00	300.00					300.00		
Langille Engineering	793.97	11.61	805.58	71.50		71.50		805.58		3
Law Students Loan Fund	1,423.16	12.99	1,436.15	274.00		50.00	224.00	1,212.15	1	1
Leighton, Susan, Memorial	203.37	{ 56.68 } { -50.00 }	210.05					210.05		
Marriott, Alice M.	3,124.80	{ 93.31 } { 132.26 }	3,350.37	2,908.00		415.00	2,493.00	857.37	3	3
Medical Faculty Relief	737.24		737.24					737.24		
Carried forward	\$ 114,050.70	\$ 17,423.62	\$ 131,474.32	\$ 66,747.26	\$ 13,730.14	\$ 19,489.07	\$ 61,029.39	\$ 70,444.93	143	252

Loan Funds (Continued)									
Brought forward									
	Invested in Fund Aug. 31, 1942	Additions to Fund during Year	Invested in Fund Aug. 31, 1943	Outstand- ing Loans Aug. 31, 1942	Loans Made during 1942-43	Loans Re- paid during 1942-43	Outstand- ing Loans Aug. 31, 1943	Balance Avail- able for Loans Aug. 31, 1943	Balance Aug. 31, 1943
Memorial Loan Fund at Stanford	\$114,050.70	\$17,423.62	\$131,474.32	\$ 66,747.26	\$13,730.14	\$19,489.07	\$ 61,029.39	\$70,444.93	143 252
	1,215.04	{ 1.00 }	1,233.54		1,410.10	482.00	928.10	305.44	15 2
Meyer, Louise Wiepking	1,250.00		1,250.00		548.00	218.00	330.00	920.00	5 2
Nelson, Hans Christian, Memorial	1,323.42	{ 4.48 }	1,382.90	425.00		35.00	390.00	992.90	
		{ 55.00 }							
Nurses' Loan Fund	1,005.42		1,005.42	558.00	75.00	438.00	195.00	810.42	1 9
Nutt, Joseph R.	500.00		500.00	500.00			500.00		
Palo Alto P.E.O.	440.48	.50	440.98	270.00	50.00	50.00	270.00	170.98	1 1
Patek, Dr. Robert, Memorial	12,893.11	82.19	12,975.30	10,159.45	1,480.00	1,005.00	10,634.45	2,340.85	8 8
Pi Lambda Theta	100.00	1.35	101.35	83.00		83.00		101.35	1 1
Pope, Mrs. George A., Senior Loan Fund for Medical Students	2,000.00	1,000.00	3,000.00	790.00	560.00		1,350.00	1,650.00	4 4
Roble Club	509.19	4.08	513.27	245.00		124.00	121.00	392.27	1 1
San Francisco Panhellenic	667.95	36.70	704.65	348.00		13.00	335.00	369.65	1 1
School of Medicine	425.00		425.00	284.00		25.00	259.00	166.00	
Sloss, M. C.	600.00	56.30	656.30	600.00		475.00	125.00	531.30	5 5
Smith, Everett W., Memorial	330.02	6.05	336.07	40.00		40.00		336.07	1 1
Speech and Drama	961.41	6.12	967.53	105.00		15.80	89.20	878.33	
Stanford Alumni Association Medical School Graduate	767.40	{ -10.00 }	829.90	160.00	50.00		210.00	619.90	1 1
		{ 72.50 }							
Stanley, Romaine Josephine	11,454.49	344.34	11,798.83	8,650.60	840.00	1,619.00	7,871.60	3,927.23	7 9
Stanford Mothers' Club Memorial	1,043.64	4.00	1,047.64	763.00	236.27	499.00	500.27	547.37	3 7
		{ 36.13 }							
Stern, Ruth	6,415.28	{ 10.00 }	3,807.41	5,237.90	-2,654.00	262.50	2,321.40	1,486.01	1 1
		{ -2,654.00 }							
Student Aid	75.00	50.00	125.00					125.00	
Student Unemployment Committee Fund	890.84	-890.84		278.02		25.00	{ 253.02 }		1 1
							{ -253.02 }		
Carried forward	\$158,918.39	\$15,657.02	\$174,575.41	\$ 96,244.23	\$16,325.51	\$24,898.37	\$ 87,459.41	\$87,116.00	188 301

STUDENT LOAN FUNDS—Concluded

Loan Funds (Concluded)		Invested in Fund Aug. 31, 1942	Additions to Fund during Year	Invested in Fund Aug. 31, 1943	Outstand- ing Loans Aug. 31, 1942	Loans Made during 1942-43	Loans Re- paid during 1942-43	Outstand- ing Loans Aug. 31, 1943	Balance Avail- able for Loans Aug. 31, 1943	Loans of 1942-43	Loans of 1943-44
Loan Funds (Concluded)											
Brought forward											
Sullivan, William Allen		\$158,918.39	\$15,657.02	\$174,575.41	\$ 96,244.23	\$16,325.51	\$24,898.37	\$ 87,459.41	\$87,116.00	188	301
Sultan, Mrs. Ernest J.		500.00	500.00	1,000.00		100.00		100.00	900.00	2	
Switzer, John M., Student		2,000.00		2,000.00		280.00		1,290.00	710.00	2	
Switzer, John M., Loan and Scholarship		500.17		500.17		25.00	25.00	150.00	350.17	1	1
U.S. Government Student War Loans		250.00		250.00				250.00			
Weber, Dr. Phil H.			{ -2,643.75 }	{ 17,208.25 }		17,423.25		17,208.25			
Women's Auxiliary of the San Fran- cisco County Medical Society		6,554.80	477.18	7,031.98	4,545.76	140.00	1,024.76	3,661.00	3,370.98	1	8
Women's Auxiliary of San Mateo County		800.00	125.00	925.00				725.00	200.00		
Women's Auxiliary of the Alameda County Medical Association		115.00	75.00	190.00				115.00	75.00		
Women's Student		801.23	{ 9.24 }	{ 910.47 }		250.00	150.00	650.00	260.47	2	2
Yoemans, William T., Scholarship and Loan Fund		2,263.56	{ 83.62 }	{ 2,877.24 }	1,871.00	757.50	891.82	{ 211.96 }	928.60	9	11
Yost, Jacob			{ 517.73 }					{ 1,736.68 }			
		513.99		513.99		50.00		50.00	463.99	1	
		103.93		103.93					103.93		
Total Student Loans		\$173,321.07	\$34,765.37	\$208,086.44	\$105,460.99	\$35,351.26	\$27,204.95	\$113,607.30	\$94,479.14	206	323
Additions from Gifts						\$12,325.35					
Additions from Endowment Income						1,111.33					
Additions from Interest Income						2,534.44					
Transferred to Scholarships						-10.00					
Gift Transfers by Donors and for Cancellations						-2,704.00					
Funds Returned						-2,643.75					
Transferred from Other Loan Funds						1,553.19					
Transferred to Other Loan Funds						1,553.19					

APPENDIX II

DEPARTMENTAL REPORTS

SCHOOL OF BIOLOGICAL SCIENCES

The Executive Committee of the School for the academic year consisted of Charles Haskell Danforth (Anatomy), Walter Kenrick Fisher (Hopkins Marine Station), Edwin William Schultz (Bacteriology and Experimental Pathology), Charles Vincent Taylor (*Chairman*), Frank Walter Weymouth (Physiology), and Ira Loren Wiggins (Natural History Museum).

The Committee's chief service this year was the formulation of plans of instruction that would meet the needs especially of the premedical program of Army students, and of students training for technical military or civilian duties. It appears these needs are being met by the resident staff on the campus and at the Hopkins Marine Station for the full four-quarter schedule adopted by the University last year.

Those on leave of absence during all or part of the academic year were: Dr. William Arnold (Hopkins Marine Station) for war project research at the Eastman Kodak Company, Rochester, New York; Mr. David L. Bassett (Anatomy) as National Research Council Fellow and teaching fellow at Harvard University; Professor James Percy Baumberger (Physiology) as visiting professor of aviation physiology at the University of Southern California Medical School; Mr. William Gantvoort (Bacteriology) for work in defense industry; Professor George S. Myers (Natural History Museum) for teaching and research at the Museu Nacional, Rio de Janeiro, Brazil; Dr. Frederick J. Oliphant for temporary appointment on the teaching staff in the Department of Parasitology at Johns Hopkins University; Professor Willis H. Rich (Natural History Museum) as administrator of fishery production, Office of Co-ordinator of Fisheries for Area II (California); Dr. Reed C. Rollins (Natural History Museum), as research geneticist for the guayule investigations of the United States Department of Agriculture, at Salinas, California; and Professor Douglas M. Whitaker, to serve as executive secretary for the National Research Council, Division of Biology and Agriculture, Washington, D.C.

The retirement this year of Professor Walter Kenrick Fisher from active duty as professor of zoology, director of the Hopkins Marine Station, and an eminent authority on starfishes of the world and on other echinoderms, completes many years of valued services to the University and to science. Dr. Fisher was appointed director of the Station, while a staff member of the Department of Zoology, twenty-five years ago. The Agassiz Building was then brand new and the first to be erected on a newly acquired site. Its newness and want of facilities marked the beginnings of growth and improvements which finally brought into being the splendidly equipped teaching and research laboratories of our present Hopkins Marine Station. Of course, admixed with these visible developments were the isolation, privations, con-

flicting concerns, and other handicaps which are among the humanly natural conditions that usually are not recorded. The truer estimates of human accomplishment require the factor of time. Dr. Fisher's colleagues and many friends are glad to express here their grateful recognition not only of the well-known results of his scholarly and administrative labors but also of the less tangible personal qualities that entered into his enduring achievements.

Professor Lawrence Rogers Blinks, a member of our Biology staff who has been associated with ours and various other marine laboratories in this country and abroad, has been appointed to succeed Professor Fisher as director of the Hopkins Marine Station.

The Biology Seminar, under the direction of Professor Smith, was continued throughout this year with the usual good attendance and interest of staff and students and of visitors from the campus and elsewhere. In addition to staff members who participated in the programs, the following visiting speakers were heard: Hernane Tavares de Sa, professor of biology, University of São Paulo, Brazil, "Biological Sciences and Higher Education in Brazil"; Sterling Emerson, professor of genetics, California Institute of Technology, "The Genetic Determination of Biological Specificities"; D. R. Goddard, assistant professor of botany, University of Rochester, "The Activation of Germination and Respiration in *Neurospora*"; W. M. Hiesey, Carnegie Institution of Washington, "Ecotypes and Their Significance in Plant Relationships"; Floyd DeEds, research associate, pharmacology, Stanford School of Medicine, "Dehydrated Foods"; H. G. Schenck, professor of geology, "An Example of Paleontological Research"; Katherine Esau, assistant professor of botany, College of Agriculture, University of California, "Relations of Viruses to Plant Tissues"; Gordon H. Scott, professor of anatomy, University of Southern California, "Mineral Distribution in the Cytoplasm"; H. A. Barker, Division of Plant Nutrition, University of California, "Fermentation of Some Amino Acids and Other Nitrogenous Compounds"; Carl D. Duncan, professor of natural science, San Jose State College, "High Blood Pressure Put to Work"; Herbert L. Mason, assistant professor of botany, University of California, "The Relation of Paleobotany to Modern Taxonomy"; W. E. Lawrence, associate professor of plant ecology, Oregon State College, "Some Plant Associations of the Pacific Coast Area"; John R. Raper, assistant professor of botany, Indiana University, "Sex Hormones and the Sexual Process of the Fungus *Achlya*"; F. B. Lloyd, emeritus professor of botany, McGill University, "Some Carnivorous Plants, Especially: *Lentibulariaceae*, Together with the Carnivorous *Apochrypha*"; Kenneth J. Palmer, Western Regional Research Laboratory, United States Department of Agriculture, "The Structure of Proteins and Protein-Detergent Complexes"; and A. C. Hildreth, director, Guayule Research Laboratories, Salinas, "Research on the Guayule Rubber Plant."

On June 15 and 16 informal round table discussions were held at the Faculty Club House on "Some Topics in Chemical Biology." These were attended by some seventy persons from various institutions. Under the chairmanship of Professor C. H. Danforth the first discussion was on "Pigmentation in Animals" (with particular emphasis on melanins and related pigments). The second session, on "Immunology and Immunogenetics," was led

by Professor A. H. Sturtevant of the California Institute of Technology. Professor F. W. Went of the California Institute of Technology was chairman at the third meeting on "Carotenoid Pigments in Relation to Hormones, Vitamins, etc.," and Professor C. B. van Niel of the Hopkins Marine Station led a fourth discussion on "Amino Acids, Vitamins, and Other Growth Factors."

Participants included the following persons from institutions other than Stanford University: Denis L. Fox, Michael Doudoroff, Ray L. Watterson, O. L. Sponsler, Jean Bath, G. A. R. Mehlquist, Werner Braun, from the University of California; A. H. Sturtevant, Sterling Emerson, James Bonner, Albert Tyler, Dan Campbell, E. L. Zechmeister, F. W. Went, J. van Overbeek, B. T. Sheer from California Institute of Technology; Paul Burkholder, P. R. Gorham from Yale University; Margaret A. Hayden from Wellesley College; Leonard G. Worley, Brooklyn College; J. H. C. Smith, W. M. Manning, H. A. Spoehr, H. W. Milner, H. H. Strain, Garret Hardin, Carnegie Institution.

It should be noted that in addition to those who participated in our School Seminar and in the round table discussions, a number of scientists from university and research institutions in this country and abroad visited our laboratories during this academic year. Among these were: Mr. Harry Althouse, manager, Sandoz Chemical Works, San Francisco; Professor E. G. Butler, chairman of the Department of Biology, Princeton University; Dr. John F. Fulton, head of the Department of Physiology, Yale University; Colonel Loyd Griffis, Director of Research, Army Air Forces, Washington, D.C.; Commander Eric Liljencrantz, Committee on Aviation Medicine; Dr. Otto Loewi, research professor of pharmacology, New York University College of Medicine; Dr. A. H. Richards, chairman of the Committee on Medical Research; Dr. Carl F. Schmidt, professor of pharmacology, University of Pennsylvania; Dr. Irwin Stewart, chairman, Committee on Aviation Medicine; Dr. Fabio Werneck, Instituto Oswaldo Cruz, Rio de Janeiro, fellow from John Simon Guggenheim Memorial Foundation; Sewall Wright, Distinguished Service Professor of Zoology, University of Chicago, and others.

CHARLES VINCENT TAYLOR
Hersstein Professor of Biology

ANATOMY

The teaching staff of the Department of Anatomy consisted of Charles Haskell Danforth, Joseph Eldridge Markee, professors; Donald James Gray, Hadley Kirkman, assistant professors; David Lee Bassett, Ernest Dean Gardner, Charles Henry Sawyer, Robert Stuart Turner, Sheldon Kessinger Wirt, instructors; Olive Bartholomew Pellegrin, assistant in instruction. Dr. Bassett was on leave until July 1, at which time he returned to Stanford and Dr. Gardner left to accept a position at the University of Southern California. Mrs. Pellegrin has been on leave during the spring and summer quarters. All

of the rest were on duty throughout the year. Two members of the staff received promotions here and five others were offered substantial advancement in rank and salary elsewhere. Of the latter, two accepted and three chose to remain even at considerable sacrifice. Mrs. Lillas O. Eastman, who had served as secretary of the department since 1938, resigned in February to establish a home in Los Angeles. She has been succeeded by Miss E. Virginia Benjes. Mr. George Scott, technician, resigned in June to enter the Armed Forces.

Dr. Gardner, who joined the faculty of the Medical School at the University of Southern California on July 1, has been given the rank of assistant professor there and put in charge of developing the work in neurology, a task for which he is excellently fitted. During his years at Stanford, Dr. Gardner has proved a stimulating member of our group and he goes to his new post with the best wishes of the staff. In certain research problems he is continuing co-operation with former associates here.

Professor Markee expects to leave at the end of the autumn quarter to become professor of anatomy and executive head of the department at Duke University. Dr. Markee came to Stanford as an instructor in 1929 and during the past fourteen years has made an enviable place for himself both on the Stanford campus and in the ranks of American anatomists. He devised the Markee Test for pregnancy and has made many notable contributions especially in the field of menstruation and reproduction. Perhaps the most significant of his publications is the monograph on "Menstruation in Intraocular Endometrial Transplants in the Rhesus Monkey." He has been unusually successful in interesting students in undertaking special problems suited to their training and available time. With his departure the department will suffer a severe loss.

For a number of years Professor Markee has been interested in scientific visual education and has given considerable attention to its use in anatomical teaching. Two types of motion-picture presentation have been employed—animated diagrams and sequences of serial sections which can be projected in such a way as to permit the student to trace rapidly any desired structure throughout its whole extent, or to follow a part back and forth along its course. The technical difficulties in the preparation of such films are considerable, but with the assistance of Mr. Barrett and earlier, of Mr. Okumoto, they have mostly been overcome. During the past year, complete series have been prepared for the 12-day and for the 15-day mouse embryo. These have proved valuable in teaching, both for introductory work and for review purposes. The animated diagrams prepared during the current year show ovulation and fertilization, formation of germ layers in the mouse and in man, and the development of fetal membranes in man. Under Dr. Markee's supervision, Miss Margaret Maroney prepared a film showing in color successive stages in a special dissection of the human orbit. Messrs. Telford Work and William Moore also prepared a film showing relations and reflection of layers in an inguinal hernia.

The work of Dr. Markee and Mr. Bruce Berg on the blood-estrone level during the menstrual cycle, which was mentioned in last year's report, has been brought to a conclusion and is about ready for publication. Dr. Markee and students associated with him have a number of other investigations in progress,

some of which he hopes will be finished before he leaves. These include measurements of the rate of blood flow in the endometrium after the administration of ovarian and gonadotropic hormones (with Mr. Eugene Hunner), a study of contractions in myometrial transplants into the eyes of pregnant rabbits (with Mr. Hassel Mandel), and an investigation of the occurrence of umbilical sphincters in certain mammals and in man.

Professor Emeritus Arthur William Meyer has actively continued his historical studies and found time to return to several special problems which pressure of other activities had temporarily pushed aside. Professor Emeritus Frank Mace McFarland as president of the California Academy of Sciences has played an important part in upholding the standards of that institution which is maintaining and even increasing its services to the public and is continuing the publication of a steady flow of important contributions from its own staff and from the faculties of the University of California and Stanford.

Professor Gray, as heretofore, has supervised the care and preparation of material for gross anatomy and directed the preparation of special dissections used in teaching. He has also continued his record of significant variations encountered by students in the laboratory, and has prepared an outline of dissection adapted to the methods followed in this laboratory. One additional course, in fetal anatomy, is now being offered by Professor Gray. This course, open to second-year medical students, affords some of them a welcome opportunity to study the anatomy of the fetus and newborn and to review adult anatomy. During the year, Professor Gray and Dr. Gardner completed a study of the human sternochondral joints, which revealed a number of interesting new points bearing on the development and function of these articulations. A detailed report of this study will appear in the *Anatomical Record*. An account of certain anomalies of the hamstring muscles is nearly completed and the study of age changes in the human testis is being continued.

Professor Kirkman has continued his quantitative study of the reticulo-endothelial system of the rat throughout its entire life-span. He has accumulated a large amount of material representing stages up to the presenile, and an adequate number of aging animals will provide the final stages of the series. Work on the reticulo-endothelial system of one organ, the kidney, has been completed for rats at the age of weaning, and nearly completed through stages representing puberty, the height of reproductive activity, and the approach to old age. Parts of this work are now in press. He has also continued his study of the pituitary gland with further investigation of the humoral factors influencing the production of the anterior pituitary hormones. The work begun last year with Dr. Wirt on factors influencing the production of prolactin is being continued. Experiments have been initiated which it is hoped will throw light on the apparent contradiction involved in the fact that injection of estrogens into experimental animals results in a cytological picture of marked activity in the pituitary, without, however, noticeable evidence of a corresponding output of any pituitary secretion. Dr. Kirkman has been advanced to the rank of associate professor, effective September 1, 1943.

Dr. Bassett held a National Research Council Fellowship at Harvard Medical School from April 1942 to April 1943, and a teaching Fellowship in Anatomy at the same school from April to July 1943. While at Harvard, he

studied the effects of various anesthetic agents on the blood flow of dogs in shock, and the changes in the blood vessels of the rat ovary during the normal reproductive cycle. The results of these studies are to be published. Since returning to Stanford in July, he has continued the study of ovarian circulation in the rat and guinea pig and with Dr. Turner has begun a study of the autonomic innervation of the extremities.

The central topic in Dr. Sawyer's research has continued to be the enzyme cholinesterase. One paper including studies of "Cholinesterase and the Behavior Problem in Amblystoma" has appeared in the *Journal of Experimental Zoology* and a second paper is in press. The latter is a correlated anatomical, physiological, and biochemical study of the development of the enzyme in innervated and nerveless muscle, and the conclusion is reached that most of the enzyme is secreted by elements closely associated with nerve endings. A third paper which is nearly ready for publication, analyzes the early spontaneous somatic movements in teleost embryos. It is concluded that the first movements are myogenic and that these are followed by neurogenic and "reflexogenic" responses.

Further search for the element or elements producing cholinesterase in skeletal muscle has led to denervation experiments in rats, mice, and guinea pigs. In all three of the forms studied, Dr. Sawyer finds a temporary decline in muscle esterase activity after sectioning the motor nerves. Subsequently the enzyme concentration rises to several times its normal values and finally drops again on reinnervation. This suggests that some elements other than the axon endings themselves produce the enzyme. Histological study of the preparation is under way at the present time.

Kinetic evidence indicates that the esterase of muscle is the same as that present in blood serum, but the sex difference noted in the blood enzyme does not appear to occur in the muscle esterase. Cholinesterase extracted from the central nervous system differs in its effect from the blood and muscle enzyme. Dr. Sawyer now proposes to study the nature of the differences between these enzymes and to investigate the implications of the sex differences in the blood esterase.

Dr. Turner completed a study dealing with the recovery of neurons following chromatolysis, a report of which has just appeared in the *Journal of Comparative Neurology*. The data provide an anatomical basis for work now in progress on the physiological functions of Nissl substance. By comparing acutely and chronically altered nervous tissues with normal controls, the part played by the Nissl substance in cell respiration can be ascertained through an analysis of rates of oxygen consumption in the three groups. His study of the remote effects of nerve section is being continued. Special attention is now being paid to the role of the sympathetic nervous system in the genesis and transmission of peripheral pain. It is hoped that this investigation will reveal significant factors in such clinical entities as phantom limb pains, causalgia and related manifestations of peripheral nervous imbalance. With Mrs. M. I. Turner and Professor John Field of the Department of Physiology, an attempt is being made to correlate cell metabolism and structural changes occurring in mitochondria and the Golgi apparatus. Through the use of Warburg technique coupled with varying physiological substrates, specific cell enzyme inhibitors

changes in the pH of the media, and other procedures, alterations in the appearance of certain cell structures are brought about. A careful analysis of these cytological variations may well throw considerable light on certain cell organoids to which no exact functions have as yet been assigned. Dr. Turner will become assistant professor at the beginning of the academic year, 1943-1944.

Dr. Wirt has participated in the teaching of medical students and has taken most of the responsibility for courses in dissection for students in nursing and physiotherapy.

Increased demands of the accelerated program in the School of Medicine and in associated fields, together with some limitations in available materials, have to a degree impeded certain research projects, but on the whole the department is no doubt deriving some benefit from this period of limitation. It may not be out of place to mention that this is the second summer during which the staff has given full time to teaching without additional compensation and at a considerable loss, especially to the younger members, of opportunity for research and special study. This equivalent of approximately two-thirds of a prewar academic year might perhaps be counted as an otherwise unrecorded contribution to the war effort.

The Department of Anatomy takes pleasure in recording its sincere appreciation of the friendly, constructive, and sympathetic interest of Dr. Wilbur while President of the University, and in wishing for him many years of continued service as Chancellor.

CHARLES HASKELL DANFORTH
Professor of Anatomy

BACTERIOLOGY AND EXPERIMENTAL PATHOLOGY

The staff of the Department of Bacteriology and Experimental Pathology consisted of Edwin William Schultz and Charles Egolf Clifton, professors; Paul Jay Beard, associate professor of sanitary sciences; Sidney Raffel, assistant professor; Isolde Eva Loewinger, Helen Sharp Thayer, Waldo Hall Hanns, Francis John Curry, part-time teaching assistants; Gladys Newnan Lovejoy, Elizabeth Ann Irwin, and Isolde Eva Loewinger (spring and summer), technical assistants; Foss Edmund Corley, part-time technical assistant; Stella Adamson, Melissa Misenheimer, and Robert Peck, assistants. Pauline de Fremery served as Department Secretary until April 1, when she entered the Women's Auxiliary of the United States Marine Corps. She was succeeded by Margaret Fish Arioto.

Dr. George Quan Lee, instructor, was absent on leave, serving in the Medical Corps of the Army. Wilhelm Frederick Gantvoort, research associate, was absent on leave, engaged in war-production work.

The courses offered during the year include: general bacteriology, medical bacteriology, immunology and serology, general pathology, filtrable viruses, advanced medical microbiology, and bacterial physiology. In some cases these courses were repeated. Instruction during the year was on the four-quarter, or

"accelerated," basis. The teaching program was planned to meet not only the needs of medical students, but those of undergraduate students preparing for bacteriological and clinical laboratory work. There is at present a heavy demand for technicians in the latter two fields. One class completed the group of courses for technicians at the end of the winter quarter, while a new class of about twenty students was enrolled for the spring and summer quarters. The course covers three quarters and is based on eight or nine quarters of basic training—the equivalent of the premedical course. In addition, the department has provided informal instruction to a small number of graduate students. Considering the greatly increased demand for bacteriologists, it is unfortunate that this group of students has decreased sharply, owing no doubt in part to reluctance on the part of Selective Service Boards to grant occupational deferment to men wishing to prepare for bacteriological work.

The rather heavy teaching program and a shortage of experienced research assistance curtailed some normal opportunities for carrying on research work. However, each member of the teaching staff has managed to keep work on older research projects alive and to launch some new work. Professor Schultz continued his studies on certain aspects of the poliomyelitis problem and on olfactory-nerve-cell regeneration. With Elizabeth Ann Irwin he continued studies on the cultivation of certain strains of poliomyelitis virus; with Francis John Curry he studied the influence of bacterial hosts on the amount of bacteriophage produced during lysis—a study bearing on the pathogenesis of virus infections. He also studied in some detail the bacterial flora of an extensive and stubbornly infected burn case dating from Pearl Harbor and worked on the therapy of this infection. Studies were also carried out on the biology of *Pseudomonas aeruginosa*.

Professor Clifton continued his studies on the relationship between respiration and assimilation in cultures and in suspensions of bacteria. With Miss Isolde Eva Loewinger he continued studies on the mode of action of the sulfonamide drugs, particularly with reference to the inhibition of respiration in various bacterial species under aerobic and anaerobic conditions. During the past several months he has also studied rather intensively factors influencing the production of penicillin, an antimicrobial substance produced by the mold, *Penicillium notatum*, which has proved highly effective in the treatment of certain bacterial infections. In this study he has been concerned chiefly with the conditions which favor the yield of penicillin in large amounts and with methods which might prove serviceable on a commercial scale. With Miss Marguerite Greaves he has undertaken to survey local soils for the presence of other fungi possessing antimicrobial properties and has started a collection of known fungi possessing such properties from other laboratories for the purpose of a comparative study later.

Professor Raffel continued his studies on the essential immunizing antigen of the human tubercle bacillus. These studies involve the use of highly purified chemical fractions of the tubercle bacillus in an attempt to dissociate, if possible, hypersensitiveness (allergy) to tuberculoprotein from the mechanism underlying true immunity. Associated with him in these studies were Marion Catherine Garner, Helen Sharp Thayer, and Waldo Hall Hanns. His work has recently been aided by a large amount of highly purified protein derivative

of the tubercle bacillus (P.P.D.) generously provided by Sharpe and Dohme, Inc., of Glenolden, Pennsylvania. The work, thus far largely supported by the Fluid Research Fund of the School of Medicine, has recently received further support in the form of a substantial grant from the California Tuberculosis Association.

During the year Dr. Raffel devoted almost three half-days per week to the Men's Health Service, later to the Medical Dispensary of the ASTAR unit, as medical attendant, to help meet the shortage of medical attendants in these services.

EDWIN WILLIAM SCHULTZ
*Professor of Bacteriology
and Experimental Pathology*

BIOLOGY

The staff of the Department of Biology during the year consisted of Charles Vincent Taylor, George Wells Beadle, Lawrence Rogers Blinks, Gordon Floyd Ferris, Walter Kenrick Fisher, Willis Hugh Johnson, George Sprague Myers,* Cornelis Bernardus van Niel, Willis H. Rich, Tage Skogsberg, Gilbert Morgan Smith, Victor Chandler Twitty, Douglas M. Whitaker,* and Ira L. Wiggins, professors; Rolf Bolin, Arthur C. Giese, associate professors; Joseph Frederick Oliphant, William A. Arnold,* Reed Clark Rollins,* and Edward L. Tatum, assistant professors; Frederick Read Evans, instructor.

Dr. Beadle, in collaboration with Drs. E. L. Tatum, N. H. Horowitz, and D. M. Bonner and with the assistance of Miss Caryl L. Parker, Miss Esther Davis, Miss Verna Coonradt, and Mrs. Mary B. Houlahan, and others, carried on investigations of the biochemical genetics of *Neurospora crassa*. Additional mutant strains from ultraviolet treated material have been isolated. These include "inositoless," "cholineless," "valineless," "threonineless," "phenylalanineless," and a number of others. In addition, a number of "morphological" mutants have been obtained.

Drs. Bonner, Tatum, and Beadle have summarized for publication studies on a mutant requiring the amino acids valine and isoleucine. Dr. F. J. Ryan (former National Research Council Fellow at Stanford University), and Drs. Beadle and Tatum have prepared for publication an account of the "tube method" of studying growth of *Neurospora*.

Drs. Horowitz and Beadle have prepared for publication an account of the use of a "cholineless" mutant in the bioassays for the growth factor choline.

Miss Verna L. Coonradt has continued studies on heterocaryosis and had developed further the general method of using heterocaryons in studies of dominance in *Neurospora*.

Mr. Adrian M. Srb, Nutrition Foundation Fellow, has continued studies of "arginineless" mutants, and has collaborated with Dr. Horowitz in studies of the arginine cycle evidently present in plants.

* On leave part or all of academic year.

Mr. David C. Regnery, working under a Nutrition Foundation Fellowship, has continued work on "leucineless" mutants and on the development of a bioassay for leucine.

Mr. August H. Doermann has continued his work on "lysineless" mutants and on the development of a lysine bioassay. This work has been made possible by the awarding of the Nutrition Foundation Fellowship to Mr. Doermann.

Mr. Frank Hungate, Royall Victor Fellow, has studied a mutant requiring the amino acid serine.

Dr. Beadle attended the meeting of the American Chemical Society in Detroit in April and in collaboration with Drs. Tatum, Horowitz, and Bonner, presented a paper on "The Use of *Neurospora* Mutants in Bioassays for Vitamins."

Professor Blinks, in collaboration with Professors Whitaker and Twitty, has devoted most of his research time to war problems under government contract, results of which cannot now be published. In this work Drs. Robert B. Dean and Morgan Harris, and Messrs. W. E. Berg and Emerson Reed have co-operated. However, Dr. Blinks has devoted some time also to investigating the cultural conditions of *Halicystis*, which has been kept in the laboratory for well over a year, provided a low temperature (12°) is maintained, and mineral nutrients added to the sea water. This technique will give a supply of cells between the natural collecting period (in the spring) and aid in future year-round research. This will be continued at the Hopkins Marine Station, of which Dr. Blinks becomes the director on September 1.

Under the direction of Dr. Blinks, Miss Suzanne Biossat investigated the effect of partial shading and shortened-daylight exposures on the anatomy and rubber content of the guayule plant. Mr. Phillips M. Brooks submitted his Doctoral dissertation on "The Effects of Sulfur Dioxide on the Aquatic Plant *Elodea*," based on work done under tenure of a fellowship from the American Smelting and Refining Company.

During the past year, Dr. Campbell has been engaged upon some problems of plant distribution, with an attempt to explain the occurrence of identical or closely related species, in regions now very far apart—e.g., the presence of fuchsias in South America and New Zealand, and nowhere else. He has just completed a somewhat extensive study on the subject, which is about ready for publication.

Dr. Child's researches on spatial oxidation-reduction patterns in development were continued with studies on the relation of these patterns to fission in various species of ciliate Protozoa and in an oligochete annelid. Further data on starfish and ascidian patterns have been obtained and patterns of plant roots and root hairs are under investigation.

Dr. Graham P. DuShane, assistant professor of zoology, University of Chicago, was invited here as acting assistant of biology to give general biology with Dr. L. Dale Leslie, during the spring and summer quarters. He carried on researches with Professor Twitty on the pigmentary system of Amphibia as a continuation of his investigations at the University of Chicago, and previously here at Stanford when he was National Research Fellow several years ago. Dr. DuShane was also one of the speakers in the symposium held at Stanford on "Some Topics in Chemical Biology."

During the past year, Dr. Frederick R. Evans, in addition to regular teaching schedule and instruction of premedical students in the ASTP programs in the summer quarter, has corroborated and extended his experiments on nuclear studies in the ciliate, *Woodruffia metabolica*, and a report, entitled "Nuclear Studies in the Ciliate *Woodruffia metabolica*," is now submitted for publication.

An ecological study has been completed in the Wasatch Mountains, Utah, in collaboration with Professor W. P. Cottam of the University of Utah. The title of the paper is "A Comparative Study of the Vegetation of Grazed and Ungrazed Canyons of the Wasatch Ranges, Utah." In its revised form, this has been accepted by *Ecology* for publication.

Dr. Giese continued his studies on the nutrition and respiration of micro-organisms and of their responses to radiations. The effects of ultraviolet radiations on the cleavage rate of eggs of a number of species of East Coast animals were studied at Woods Hole, Massachusetts. It was found that a given dosage administered to the sperm was far more effective than when administered to the egg. This effect was attributed to the greater exposure of the nucleoproteins in the sperm than in the egg. The sperm of Echinoderms were found to be especially sensitive.

The effect of several vitamins of the B complex on respiration of *Neurospora* was studied in collaboration with Dr. E. L. Tatum. When para-aminobenzoic acid was added to a culture of *Neurospora* of the p-aminobenzoicless mutant appropriately starved for the vitamin an increase of 25-40 per cent in respiration was found. Similar effects were obtained for thiamin, pyridoxin, and pantothenic acid. These results suggest that the vitamins of the B complex for which no specific respiratory role has yet been assigned play a role in the respiratory mechanism.

Mr. Haxo studied the effect of light on conidiation of strains of *Neurospora* which show rhythmic conidiation. He found that only certain strains show a sensitiveness to light.

The latter half of the year was spent in work on "Sunburn Protection" for the purpose of which the O.S.R.D. has granted a contract. Since the results of this work are restricted the conclusions cannot be summarized here.

Professor Johnson, with the assistance of Mr. Philip Carpenter, continued the investigation of the nutritional requirements of *Paramecium* grown in a sterile pressed yeast juice medium. The effects of variations in the salt content of medium and in the pH of the medium were determined. Preliminary experiments on the nutritional requirements of *Endamoeba histolytica* were started. In the autumn quarter, Dr. Johnson collaborated with Dr. Taylor and Dr. Oliphant in giving a new course in comparative parasitology. He also served as director of the Premedical Unit of the Army Specialized Training Program, which started in July 1943.

Dr. Oliphant spent the autumn quarter as a fellow in the School of Hygiene and Public Health at Johns Hopkins University, studying new techniques and recent developments in the field of parasitology, preparatory to taking part in a new program of parasitology at Stanford. During the year he carried on a study on effects of chemicals which affect smooth-muscle contraction on ciliary activity and obtained further evidence that the phenomena may be of the same fundamental nature. Progress was made on an investigation of trace elements

Mr. David C. Regnery, working under a Nutrition Foundation Fellowship, has continued work on "leucineless" mutants and on the development of a bioassay for leucine.

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Mr. Haxo studied the effect of light on conidiation of strains of *Neurospora* which show rhythmic conidiation. He found that only certain strains show a sensitiveness to light.

The latter half of the year was spent in work on "Sunburn Protection" for the purpose of which the O.S.R.D. has granted a contract. Since the results of this work are restricted the conclusions cannot be summarized here.

Professor Johnson, with the assistance of Mr. Philip Carpenter, continued the investigation of the nutritional requirements of *Paramecium* grown in a sterile pressed yeast juice medium. The effects of variations in the salt content of medium and in the pH of the medium were determined. Preliminary experiments on the nutritional requirements of *Endamoeba histolytica* were started. In the autumn quarter, Dr. Johnson collaborated with Dr. Taylor and Dr. Oliphant in giving a new course in comparative parasitology. He also served as director of the Premedical Unit of the Army Specialized Training Program, which started in July 1943.

Dr. Oliphant spent the autumn quarter as a fellow in the School of Hygiene and Public Health at Johns Hopkins University, studying new techniques and recent developments in the field of parasitology, preparatory to taking part in a new program of parasitology at Stanford. During the year he carried on a study on effects of chemicals which affect smooth-muscle contraction on ciliary activity and obtained further evidence that the phenomena may be of the same fundamental nature. Progress was made on an investigation of trace elements

in nutrition, indications being obtained that some growth factor deficiencies reported for lower organisms may be specific mineral deficiencies. With Robert Spalding he began a preliminary survey of blood parasites of animals of the Stanford area with particular reference to the malarias of birds.

The monograph by Professor G. M. Smith, describing all marine algae found on the Monterey Peninsula, has been completed and is now in course of publication by the Stanford University Press. Each of the 425 species in the local flora is described in full and illustrations are given for about 75 per cent of them. During the course of this investigation approximately 25 new species have been discovered and about 80 previously known species have been collected on the Monterey Peninsula for the first time. Some of the results have been incorporated in two papers published this past year, one discussing brown algae, the other (a joint publication with Professor G. J. Hollenberg of Redlands University) discussing red algae.

During the past year Professor Smith has begun and has made considerable progress on a comparative study of all known species of *Volvox*.

In addition to the foregoing investigations Professor Smith has rewritten three long and five short articles on algae for the next edition of the *Encyclopaedia Britannica*. He has also continued to serve as editor for algae for *Biological Abstracts* and for the *Botanical Review*.

Dr. Tatum continued the investigations of the biochemical genetics of *Neurospora* in collaboration with Drs. Beadle, Bonner, and Horowitz.

Drs. Tatum, Beadle, and Bonner have investigated the characteristics of a "tryptophaneless" mutant of *Neurospora*. The results indicate that this organism synthesizes tryptophane by a hitherto unknown mechanism.

In collaboration with Drs. F. J. Ryan and A. C. Giese, an investigation of the inhibiting effect of iodoacetic acid on the growth and respiration of *Neurospora*, and of the role of four carbon dicarboxylic acids in the release of this inhibition, has been completed and summarized for publication.

Drs. A. C. Giese and E. L. Tatum have continued their studies on the functions of pantothenic acid, p-aminobenzoic acid, and pyridoxin on the respiration of mutant strains of *Neurospora*. Their studies of the effects of sulfanilamide on growth and respiration of *Neurospora* have also been continued. Reports on these two problems are practically ready for publication.

In collaboration with Drs. L. Garnjobst and C. V. Taylor, further studies on the known and unknown growth requirements of *Colpoda duodenaria* have been completed and summarized for publication.

The universal importance to all forms of life of the vitamins of the E complex has been substantiated by the results of a study of the vitamin content of cells of photosynthetic purple bacteria, using *Neurospora* mutant strains for the vitamin assays.

Mr. T. T. Bell has continued his investigation of the biochemistry and genetics of the synthesis of thiamin by a number of mutant strains of *Neurospora*.

Mr. C. H. Gray has studied the vitamin and growth requirements of a number of strains of acetic acid bacteria and is investigating the possibility of producing "mutant strains" of these bacteria by ultraviolet radiation.

The research program of Dr. Taylor was continued with the helpful aid

especially of Dr. E. L. Tatum and Dr. Laura Garnjobst on nutritional requirements of the unicellular organism, *Colpoda duodenaria*, as related to protoplasmic reorganizations during its induced encystment and excystment. As previously reported, the food component, which was found to be primary in the phenomenon of induced encystment, and so of reorganization of both cytoplasm and nucleus, could have significance only upon its complete analysis and the identification of any factors responsible for that induction. This undertaking required first of all a reproducibly sterile medium that should supply all nutrient needs. Considerable progress has been made to that end and the results of our studies have been published or are in press. From these results and from others obtained in our laboratories here, it now seems likely that quite adequate sterile media may be found for many other unicellular forms. If so, this should mark a new departure for researches of distinctly fundamental importance on these readily available living cells. Some preliminary studies were undertaken also on reorganization changes in the tissue cells of regenerating pieces of the tunicate, *Clavelina hunstmani*, which is available in abundance at the Hopkins Marine Station. With the technical help of Mr. W. K. Bowen, our microtechnician, these regenerating pieces were fixed, sectioned and stained for detailed microscopic study. Thus far, the indications are that all the tissues of such pieces undergo apparently complete cytoplasmic dedifferentiation, not unlike that in unicellular organisms preparatory to their regeneration.

Dr. Taylor was one of two members of the Stanford University faculty to receive election to the National Academy of Science during this year.

Professor Twitty, with the assistance of Dr. Morgan Harris, investigated the factors which initiate and direct the migration of embryonic pigment cells from the spinal cord to their definitive position in the skin. By observing the movements of these cells *in vitro* under various experimental conditions, it could be demonstrated that their dispersion is the result of a mutual stimulation, apparently mediated through diffusible substances released by the cells. Migration ceases when the cells become spaced beyond the effective range of such mutual action. It could also be demonstrated that these factors operate in the normal embryonic environment.

Dr. Twitty and Dr. Harris also participated with Professors Whitaker and Blinks in a confidential research program under government contract.

Professor Whitaker, in collaboration with Professors L. R. Blinks and V. C. Twitty, Dr. R. B. Dean, Mr. W. E. Berg, and Dr. Morgan Harris, engaged until January 1943 in applied scientific research carried out for the government. In the winter, spring, and summer quarters in 1943, Dr. Whitaker was on leave from the University, in residence in Washington, D.C. During this time he served as executive secretary of the Division of Biology and Agriculture of the National Research Council, and aided in gearing biological research into the war effort.

CHARLES VINCENT TAYLOR
Herzstein Professor of Biology

HOPKINS MARINE STATION

The resident staff consisted of Walter K. Fisher, director, Rolf L. Bolin, C. B. van Niel, and Tage Skogsberg. Additions to the staff for the summer quarter were Gilbert M. Smith and A. R. Moore. William A. Arnold, a resident staff member, has been absent since 1941, engaged in war work.

Research.—Director Fisher has continued studies on Sipunculoid worm in the collection of the United States National Museum, of which institution he was appointed Associate in Zoology, prior to his retirement at the end of the academic year.

Dr. Rolf L. Bolin continued his systematic studies on the marine fishes of California and, using material collected from albacore stomachs, pursued investigations on the osteology of the Myctophidae, a family of deep-sea fishes whose skeletal system has never been studied.

Miss Dixie Lee Ray continued her work on the comparative anatomy of the nervous system of fishes of the order Iniomi.

During the summer quarter Dr. A. R. Moore completed a study on maternal and paternal inheritance in the hybrid pluteus larvae of the sea urchins, *Strongylocentrotus purpuratus* and *S. franciscanus*, which is now in press. He conducted experiments on the effects of pyocyanine and lithium on the initial development of the eggs of sea urchin and sand dollar (with E. H. Anderson and Howard S. Bliss). Material was also gathered for a note on the development of larvae from the eggs and sperm of a gynandromorphic sand dollar.

The following is the report of Dr. C. B. van Niel and associates: For the new edition of Bergey's *Manual of Determinative Bacteriology* the Board of Editors has requested a detailed taxonomic-determinative treatment of the genus *Propionibacterium* and of the order *Thiobacteriales*. The manuscript of the former has been submitted and accepted. The classification of the sulfur bacteria has presented many difficulties which have necessitated new studies on members of the group, particularly of the colorless marine sulfur bacteria. The recent investigations, in which Miss D. L. Ray has ably assisted, have clarified many points, and the detailed classification of the colorless sulfur bacteria has been completed. A similar approach to the purple, brown, and green sulfur bacteria is now being worked out.

The monograph on the culture, morphology, general physiology, and taxonomy of the non-sulfur purple and brown bacteria is nearly finished in MS.

Experimental work has been started on the following subjects:

I. The sugar fermentation by *Aerobacillus macerans*

This fermentation is characterized by the production of acetone, and is therefore at present of great industrial importance. The normal yield of acetone is about 8 per cent of the fermented sugar; it is accompanied by a three-time larger quantity of ethyl alcohol. Theoretical considerations of the possible mechanisms of the fermentation process made it appear likely that special environmental conditions could influence the subsequent fate of a number of postulated intermediate substances, so that the final fermentation product would occur in a ratio much more favorable to acetone. The experiments to date have shown this to be correct, but the extent to which the modification

in fermentation products is possible has not yet been determined. It seems, however, that the fermentation can be guided in such a way that the main product is acetone rather than ethyl alcohol.

II. The bacterial retting of guayule shrub

This investigation, a continuation of a project started many years ago, and then temporarily interrupted, aims at the establishment of conditions whereby the yield and quantity of guayule rubber can be improved by a previous retting process. That such improvements are possible has been shown in the past. On the other hand, results have also been reported in which it is claimed that a previous retting of the shrub does not affect either the quality or the quantity of the product.

It has recently been established that the rubber milled out from guayule contains appreciable amounts of heavy metals, especially iron, manganese, and copper. Since these substances are known as powerful oxidation catalysts it may be postulated that the poor quality of most guayule rubber is in part due to oxidative decompositions of the rubber hydrocarbon.

Since various types of decomposition must be admitted as occurring simultaneously during an ordinary retting process, in which many kinds of bacteria participate, it seems likely that only certain of these decomposition processes exert a favorable effect. Rather than by studying the retting with a large variety of pure cultures of bacteria, a theoretical approach has been adopted for further experimental study. On the supposition that during the retting the generation of sulfide, not uncommon in microbial decompositions, would cause the precipitation of the heavy metals as metal sulfides, which in turn would counteract their participation in catalytic oxidations, it became desirable to conduct retting experiments under such conditions that an abundant generation of hydrogen sulfide was insured.

Such experiments have been started, but it has not yet been possible to carry out an analysis of the retted material.

III. The gradual poisoning of land for the cultivation of guayule

The group of plant physiologists at the California Institute of Technology (Drs. F. W. Went, James Bonner, and co-workers) has shown that guayule plants secrete substances in the soil which cause an inhibition of the growth of neighboring plants. The chemical nature of the inhibitory substances is not yet completely known, but they appear to present similarities with dihydroxy-stearic acid, long ago reported as a root-excretory substance with inhibitory action on certain plants.

The general occurrence in soils of micro-organisms capable of oxidizing various organic substances thus made it logical to investigate whether a relationship exists between the microflora of "poisoned" and "non-poisoned" soils. Special attention has been paid to the number of organisms capable of decomposing dihydroxy-stearic acid.

The results, so far restricted to a study of a very small number of soil samples, have shown that in the now abandoned nursery beds of the Salinas guayule experimental station the number of bacteria capable of decomposing dihydroxy-stearic acid exceeds many times that found in soils not previously

planted with guayule. Inoculation experiments with the isolated bacteria have been planned.

IV. The enzymatic synthesis of polysaccharides

With Miss D. L. Ray a study has been undertaken of the peculiar polysaccharide synthesis which characterizes the activities of certain lactic acid bacteria. The perplexing aspect of this problem has been that such a synthesis occurs abundantly from sucrose, but not from the constituent monosaccharides: glucose and fructose, either present alone or in combination. This situation has in the past, led to two opposite views:

- a) The mode of decomposition of disaccharides is fundamentally different from that of the constituent hexoses.
- b) The decomposition of disaccharides leads to the formation of "active hexoses.

Although the latter view appears preferable to the former, it suffers from the failure to specify what the nature of the "active" hexoses is, and thus represents little more than a paraphrase of an experimentally demonstrated fact.

During the past few years the studies on the decomposition of polysaccharides by higher plants and animals have indicated that the initial depolymerization of such substances must be considered as a "phosphorolysis" rather than as a hydrolysis. This led to the idea that sucrose, too, might be attacked by the above-mentioned lactic acid bacteria through an initial phosphorolysis. In that case the first products of the breakdown of the disaccharide would consist of phosphoric acid esters of the monosaccharides, and it seemed possible that a spontaneous polymerization from such esters might be demonstrable.

Our experiments have confirmed this view. Synthesis of the specific polysaccharides has been achieved with crude enzyme preparations of *Leuconostoc mesenteroides* and of *Streptococcus salivarius* from both sucrose and glucose-1 phosphate.

V. Physiology of protozoa

Miss Ray has also studied certain morphological and physiological aspects of soil amoeba. The possibility of culturing this organism in the presence of any one of a number of pure cultures of bacteria, and the abundant cyst formation, combined with the ease of obtaining trophozooid development from the cysts, made it tempting to study the heat-resistance of the cysts by experimental methods. So far, the only available information with respect to the inactivation of amoeba cysts by heat is contained in a study by W. C. Boeck (1921) and the conclusions of his work rest exclusively on staining reactions because cultivation of the amoeba from the cysts was impossible.

Surprisingly, the cysts of the soil amoeba can withstand heating at 70° C for 10 minutes in liquid suspensions, after which growth of the trophozooid occurs normally. It is thus possible to kill the bacteria with which the protozoa had been growing (by using pure cultures of a variety of non-sporeforming bacterial species) while not affecting the viability of the amoeba cysts by this treatment. In this way absolute pure cultures of the soil amoeba can readily be obtained. Some preliminary studies on the nutrition of such pure cultures have been carried out, but until now growth has not been observed with media of known composition.

VI. The influence of stresses in the environment of the direction of growth of micro-organisms

Dr. Stanier has observed that certain myxobacteria respond to stresses in the culture medium in much the same way as do nerve cells. The results of this investigation have been published.

VII. The Ph.D. dissertations of Mr. J. O. Thomas and of Mr. E. H. Anderson have been completed; Dr. Stanier's Ph.D. thesis has been published in full.

Dr. T. Skogsberg finished a study of the taxonomy of the Coelenterate family Polyorchidae and the resulting manuscript has been accepted for publication. In addition he carried on work on the cytological aspect of digestion and on the relation between light and the spawning activities of a member of this family.

Mr. Irving McClurkin continued his studies on the systematics and ecology of the local species of the Amphipod family Orchestiidae and had brought this work close to completion when he was appointed to a position with the United States Bureau of Entomology and hence interrupted temporarily his work with us.

Of prime importance to the Station has been the completion by Dr. Gilbert M. Smith of a monograph describing all the marine algae found on the Monterey Peninsula. This is now in course of publication by the Stanford University Press. Each of the 425 species of the local flora is described in full and illustrations are given of about three-fourths of them. During the course of this investigation approximately 25 new species have been discovered and about 80 previously known species have been collected on the Monterey Peninsula for the first time. Some of the results have been incorporated in two papers published this past year, one discussing brown algae, the other (a joint publication with Professor G. J. Hollenberg of Redlands University) discussing red algae.

During the year Mr. Howard Bliss has been a research assistant, under a grant from Merck and Company of Rahway, New Jersey. This assistantship was established to investigate the effect of penicillin on the metabolism of micro-organisms.

Dr. Earl H. Myers has for the past eight months worked as a visiting scientist and Research Associate in Paleontology on funds from the Geological Society of America and from Sigma Xi. He is engaged in studying the ecological relationships of the Foraminifera and their role in marine sedimentation in relation to paleo-ecology and petroleum geology. During his sojourn at the Station, two papers and two reports have appeared as outgrowths of his major problem which is a qualitative and quantitative study of the Foraminifera of the Java Sea and the conditions that limit the geographic distribution of species. The material for these studies was taken by him over a period of 16 months from stations situated at intervals of one degree and from many coral islands of the region.

Mr. Julius B. Phillips, Bureau of Marine Fisheries, Division of Fish and Game of California, continued his residence at the Hopkins Marine Station.

He has been co-operating with the United States Fish and Wildlife Serv-

ice in a joint scale-reading project involving the California sardine or pilchard, *Sardinops caerulea*. Data from two sources have now been accumulated in which the daily age composition of the commercial sardine catch at the different ports has been determined. This project is furnishing facts regarding abundance, mortality rates, and the rate of growth of the different age groups constituting the catch.

Owing to current war conditions, the research program of the Bureau of Marine Fisheries is suffering because of loss of personnel and of boats to the Armed Forces. As a consequence, little more than the necessary routine work can be carried on.

During the period from August 1942 to February 1943, Mr. James T. Deuel and Mr. Motje W. Hansen also resided at the Hopkins Marine Station, as members of the Bureau of Marine Fisheries. They assisted with the sardine program by sampling, daily, from a biological standpoint, the commercial sardine catch in the Monterey region. In February, Mr. Hansen enlisted in the Navy, while Mr. Deuel entered the Army.

Dr. David Spence throughout the year confined his work almost entirely to problems connected with the production of rubber from various plant sources, more particularly from Guayule, Kok-Saghyz, and *Cryptostegia*. As consultant to the Office of Rubber Director in Washington, he initiated studies on the extraction of rubber from these sources and on the treatment of rubber in order to avoid deterioration in processing.

Owing to war conditions there has been an absence of visiting investigators, and student attendance during the summer quarter has been about one-fourth normal.

Among visitors for short periods were: Dr. C. M. Child, Stanford; Dr. P. Burkholder, Yale University; Mr. Albert E. Galligher, Berkeley, California; Dr. Harold Hibbert, McGill University; Dr. Laszlo Zechmeister, California Institute of Technology.

WALTER K. FISHER, *Director*

PHYSIOLOGY

The active staff of the Department of Physiology consisted of Frank Walter Weymouth, James Percy Baumberger, John Field II, and Victor E. Hall, professors; Jefferson Martineau Crismon, assistant professor; Margaret Lindsay Turner, instructor; and Frederick A. Fuhrman and Mrs. John Field, teaching assistants. Craig Lee Taylor, assistant professor in the School of Health, has held corresponding rank in the department and continued as responsible investigator for the Office of Scientific Research and Development (O.S.R.D.) project on cardiovascular-respiratory fitness tests until its completion during the summer of 1943. In connection with this project the following served during some part of the year: Frederick Crescitielli, acting assistant professor; Royce K. Skow, Guy E. Brown, Robert G. Morris, research assistants; Helen Morris, secretary-statistical clerk; Mrs. Ellen Burton and Bernard Hansen, technical assistants. On the staff of

the O.S.R.D. project on visual perception of distance, J. M. Hirsch, research associate, and Helen Morris, statistical clerk. On the hypothermia research, Frederick A. Fuhrman, Shannon C. Allen (now in the United States Air Force), Mrs. Ellen Burton, and Mrs. Geraldine Fuhrman.

The past year has again been dominated by increased teaching duties and emergency tasks arising from the war conditions. In spite of the increased load the quality of both teaching and research has been maintained at a high level and the staff deserves commendation for the spirit in which the extra work has been undertaken. However, it must not be forgotten that these are emergency conditions and that while meeting them the long-term view must not be neglected. The increased work load and the practical absence of vacations will progressively reduce efficiency and cause a decline, particularly in creative research. It is necessary that the University, even during the emergency that enlists all of our energies, look forward and plan for the restoration of conditions favorable for constructive work as soon as circumstances permit.

Instructor Margaret L. Turner has extended the study of the lymphoid system of the mouse. A paper, written in collaboration with Professor Hall, entitled "The Effect of Removal of a Large Part of the Lymphoid System on the Weight of the Portion Remaining in situ," was published in the April issue of the *Anatomical Record*. The investigation undertaken last year with Professor Field on the influence of environmental temperature on the body temperature and metabolism of the mouse has been continued with the assistance of Mrs. Geraldine Fuhrman and Miss Anne Cady. A Master's thesis, entitled "The Effect of Cold and Dinitrophenol on the Metabolism and Temperature Regulation of Albino Mice," has been completed by Mrs. Fuhrman. This work is to be published. The effect of thyroxin on the adequacy of adjustment to acute environmental cold by the mouse has been investigated with Anne Cady. Results show a decreased rate of body-temperature fall in animals receiving thyroxin when they are subjected to brief periods of intense environmental cold. The work is to be amplified and the results published. In collaboration with Dr. Robert S. Turner of the Department of Anatomy she has undertaken a study of the correlation of the oxygen consumption with certain structural characteristics of the mammalian cell. The course of oxygen consumption in rat-liver slices at various temperatures has been followed by the Warburg technique and compared with changes undergone by the mitochondria during the same period. The respiration of slices of the normal cord has been determined and compared with that of cords in which chromatolysis of the Nissl substance in a part of the lower motor neurons is in progress or has been completed. This is a field that has received little or no attention and which must be explored before full understanding of *in vitro* metabolism is possible. At the same time it promises to throw light on the functions of cell organoids concerning which there have been many speculations.

Professor Craig L. Taylor completed the O.S.R.D. project on cardiovascular-respiratory fitness tests and is now a First Lieutenant in the Air Corps, stationed at Randolph Field. The results of the work have been embodied in a series of reports to the Medical Research Committee, but the

details cannot be made public at this time. The aim of the project was to develop tests of physical fitness which would have selective value and at the same time be brief enough for practical use under Army conditions. The tests heretofore available have been empirical and the scores have not been statistically analyzed; in fact in some cases elements in a battery have been found to reduce the predictive value of the test. In the present work the scores of a variety of tests both old and new have been analyzed by modern statistical methods not only for reliability and validity but for the contribution of each element in the battery. As a result of these studies a firm general basis has been laid for the construction and evaluation of tests of this type, and an efficient short test has been developed for military use.

During the autumn, winter, and spring quarters Professor Crismon served as part-time medical consultant in the Men's Student Health Service two half-days each week.

Research during the year has been continued on the effects of low body temperatures on tissue respiration and on the intact white rat. Professor Crismon's work has been devoted almost entirely to the whole-animal studies with special reference to the effects of low temperatures on the circulation and respiration. Evidence of profound depression of both the circulation and respiration has been obtained in a large series of animals. Measurements of the heart rate and the arterial pressure with decreasing body temperature show that the arterial pressure falls to critical levels when the heart has been slowed by cold to about one-third its rate at normal body temperature. After the decline in arterial pressure, signs of marked impairment in respiration and in the conduction of the cardiac impulse appear. In those cases where the respiration fails early, artificial respiration is effective in delaying the onset of heart block or in restoring the normal rhythm if block has been present for only a short time. Without support of the circulation, however, the use of artificial respiration is sharply limited as an effective restorative measure. A method of heating the heart locally through the use of an electrically heated coil passed down the esophagus to the level of the heart has been developed. Local heating of the heart prevents the extreme slowing usually encountered when the body temperature is reduced below 20 degrees centigrade, and this in turn serves to maintain the circulation to the central nervous system. Evidence for this maintenance is the continued rapid, deep breathing and the appearance of shivering at rectal temperatures usually associated with the cessation of both of these responses.

The foregoing observations justify the suggestion that death in hypothermia is the outcome of the following series of events: circulatory failure arising from diminished cardiac output, respiratory failure resulting from circulatory failure, with death occurring from the consequent general anoxia. The changes found in the distribution of water and electrolyte in the blood and tissues are consistent with the hypothesis of circulatory failure. No other studies on the entire animal present any evidence that cold is directly responsible for the cardiac failure and the effects of cold *per se* on the central nervous system seem to have been excluded by the findings on tissue respiration reported by Professor Field.

Professor Baumberger continued work in several general fields including

biological oxidation-reduction, respiratory pigments, and cellular metabolism. In all of this work he was ably assisted by Mrs. Kathleen Bardwell, research assistant.

Dr. Ludwig Selzer continued his work in Dr. Baumberger's laboratory on a rapid stirring method of determining cellular metabolism by means of the dropping mercury electrode.

Polarographic studies were made of the effect of carbon monoxide on the affinity of hemoglobin for oxygen, the effect of bound oxygen on the determination of the oxygen tension of blood, the effect of tissue fluids on the determination of quinine, and the use of the hydrogen electrode as an anode in polarography.

Dr. Baumberger served as visiting professor of aviation physiology at the University of Southern California Medical School during the spring quarter. There he devoted all of his time to research on a government project in aviation physiology.

Professor Field, in collaboration with Dr. F. A. Fuhrman, has continued the investigation of the effects of low temperature on the metabolism of excised tissue and on the action of various metabolic stimulants and inhibitors. The results of this work have been incorporated in ten papers published since his last report. The several lines of investigation are briefly indicated below.

1. Action of propazone and of diphenyloxazolidinedione on the oxygen consumption of excised rat cerebral cortex. These two drugs, which are substituted oxazolidinediones, are closely related chemically. However, propazone appears to act solely as a narcotic or central nervous system depressant when administered to the intact animal, while diphenyloxazolidinedione (DPO) is a convulsant. It was found that with rising concentration of DPO there was first a moderate augmentation, then an inhibition of brain respiration. The augmentation phase did not occur with propazone. Furthermore there was more rapid development of inhibition of oxygen uptake and a greater maximum inhibitory effect with DPO than with propazone. However, both inhibitors decreased the oxygen uptake of cerebral cortex slices more when glucose was the chief fuel available to the brain than when this fuel was succinate. With each drug the inhibition of brain respiration became relatively less marked with decrease in temperature. Thus at 37.5° C. only 10 per cent of the oxygen uptake was stable toward DPO, while at 15° C. this fraction was 36 per cent. The results with propazone were qualitatively similar. Apparently this is another case in which the fraction of the oxygen uptake of brain which is stable toward cold is also stable toward chemical inhibitors.

2. Relationships between chemical structure and inhibitory action of barbituric acid derivatives on rat-brain respiration *in vitro*. Our work on cold as a narcotic, or central nervous system depressant, led to an interest in the action of other narcotics. Current hypotheses concerning the mechanism of narcotic action are not well founded on experimental evidence. These considerations led to an investigation of some aspects of the action of the barbiturates, narcotics now widely used in medical practice and in research. Previous studies of the action of these compounds on excised brain were incomplete in that very few dosage levels had been studied. In the present

work, concentration-action curves were determined for the effects of graded concentrations of three groups of substituted barbituric acid derivatives on the oxygen consumption of rat cerebral-cortex slices. These included six alkylethyl, three allylalkyl, and three "miscellaneous" derivatives. With increasing length of the alkyl sidechain in the alkylethyl and allylalkyl derivatives there was decrease in the molar concentration of the compound required to produce 50 per cent inhibition of rat-brain respiration *in vitro*. Several other parallelisms between physical properties and biological actions of these drugs were indicated.

3. Reversibility of the inhibition of rat-brain and -kidney metabolism by cold. The data in the literature indicate that non-hibernating mammals usually die if their body temperature falls to a level of 15° or 20° C. for any appreciable time. However, while the lethal level of hypothermia is fairly well established for the rat, rabbit, cat, and dog, the cause of death from cold is not clear. The chief factor might be either failure of the supply systems, circulation and respiration, or direct and irreversible effects of cold on the brain. To decide between these alternatives, measurements of the rates of oxygen consumption and of anaerobic glycolysis were made for successive periods of one hour each at temperatures of 37.5°, 0.2°, and 37.5° C. It was found that the capacity of both brain and kidney for these metabolic reactions was fully restored on rewarming, under the conditions of these experiments. However, when cerebral-cortex slices were exposed to the 0.2° C. level for periods of three, five, seven, and twenty-four hours, the rates of oxygen consumption observed during a subsequent period of one hour showed progressive decrease. This evidence supports the view that death on acute exposure to cold is due rather to failure of the great supply mechanisms, circulation and respiration, than to direct and irreversible effects of cold on the brain. This view is supported by the report of Professor Crismon on the causes of death from hypothermia in the intact animal.

4. Effect of iodoacetate on respiration and glycolysis in excised rat brain. These experiments were undertaken as part of the general study of the effect of cold and of other inhibitors on mammalian-tissue metabolism. Specifically the present work was designed to provide further information concerning the interrelation of aerobic and anaerobic metabolism in excised rat brain. It was also designed to provide systematic data on the concentration-action and time-action relationships of iodoacetate in the inhibition of metabolism of the rat brain *in vitro*. Although iodoacetate has been used a great deal in the experimental analysis of the chemical pattern of tissue metabolism, these relationships had not been investigated in mammalian tissue over any considerable range of concentration and time. The effects were measured of graded concentrations of iodoacetate ranging from $5 \times 10^{-2}M$ to $1 \times 10^{-6}M$ on the oxygen consumption and anaerobic glycolysis of rat cerebral-cortex slices for three hours after addition of iodoacetate. All concentrations of iodoacetate tested which inhibited anaerobic glycolysis also ultimately inhibited oxygen consumption. Thus fermentation and oxygen uptake in excised rat cerebral cortex were not separable by treatment with iodoacetate.

5. Investigations were initiated in collaboration with Miss Nell Hol-

linger, Mrs. Geraldine Fuhrman, and Dr. S. C. Allen, which will be reported subsequently.

The dominating activity of Professor V. E. Hall the past academic year was the secretaryship of the Bay Area War Medical Research Project Group, a voluntary association of medical scientists at Stanford University, University of California, and other local institutions for development of medical research related to the war. Professor Hall and Dr. Ogden (University of California, Department of Physiology) made a survey of the personnel and resources available for such research in this region, and then, at the invitation of Dr. A. N. Richards of the Committee on Medical Research, they visited the Washington offices of that administrative body for about two weeks, studied its procedures and accomplishments, and conferred with Army and Navy medical research officers, in an effort to determine in what manner medical scientists in the Bay Area could engage in investigations in the field of the Committee on Medical Research. Following their return from Washington they were instrumental in the initiation of a number of research projects of war importance. In part as a result of their recommendations to Dr. Richards an advisory panel of the C.M.R. has been appointed for the Pacific Coast to carry on officially the work begun by the Project Group.

The demand by the Armed Forces for more physiotherapy technicians has led to acceleration of the Stanford University training program. As a result the course in physiology for physiotherapists has been given twice in the past academic year. In this course Professor Hall has had the able assistance of Instructor Margaret L. Turner of this department, and of Instructor Marian Williams of the School of Health. A feature of the development of the course has been the study by physiological means of responses of subjects to physiotherapeutic procedures carried out under actual clinical conditions.

The recent epidemic of poliomyelitis has greatly increased interest in the Kenny method for treatment of this disease. The Stanford University School of Health, under the immediate leadership of Miss Catherine Worthingham, has conducted a series of short courses in the Kenny method for physicians and for nurses and technicians. Professor Hall has contributed to each of these courses a lecture on the pathological physiology of the disease and its modern treatment.

The Kenny treatment at present rests largely on an empirical basis. An attempt to evaluate the concepts on which it is based reveals large gaps in physiological knowledge. In an effort to fill one of these gaps Professor Hall, with the assistance of Miss Miriam Davis, Mr. Guy Brown, and Dr. Harvey Schamp, investigated the effect of the hot fomentations used in the Kenny treatment for relief of the muscle spasms of poliomyelitis upon the force of voluntary contraction of skeletal muscle. The small decrease in force demonstrated was not considered clinically significant. The work is being continued, the influence of the fomentation on certain forms of involuntary-muscle contraction being studied.

The research program in relation to temperature regulation was very seriously hampered by unavailability of adequately trained assistants. Some progress was made, however, in the study of the effect of increasing the

work, concentration-action curves were determined for the effects of graded concentrations of three groups of substituted barbituric acid derivatives on the oxygen consumption of rat cerebral-cortex slices. These included six alkylethyl, three allylalkyl, and three "miscellaneous" derivatives. With increasing length of the alkyl sidechain in the alkylethyl and allylalkyl derivatives there was decrease in the molar concentration of the compound required to produce 50 per cent inhibition of rat-brain respiration *in vitro*. Several other parallelisms between physical properties and biological actions of these drugs were indicated.

3. Reversibility of the inhibition of rat-brain and -kidney metabolism by cold. The data in the literature indicate that non-hibernating mammals usually die if their body temperature falls to a level of 15° or 20° C. for any appreciable time. However, while the lethal level of hypothermia is fairly well established for the rat, rabbit, cat, and dog, the cause of death from cold is not clear. The chief factor might be either failure of the supply systems, circulation and respiration, or direct and irreversible effects of cold on the brain. To decide between these alternatives, measurements of the rates of oxygen consumption and of anaerobic glycolysis were made for successive periods of one hour each at temperatures of 37.5°, 0.2°, and 37.5° C. It was found that the capacity of both brain and kidney for these metabolic reactions was fully restored on rewarming, under the conditions of these experiments. However, when cerebral-cortex slices were exposed to the 0.2° C. level for periods of three, five, seven, and twenty-four hours, the rates of oxygen consumption observed during a subsequent period of one hour showed progressive decrease. This evidence supports the view that death on acute exposure to cold is due rather to failure of the great supply mechanisms, circulation and respiration, than to direct and irreversible effects of cold on the brain. This view is supported by the report of Professor Crismon on the causes of death from hypothermia in the intact animal.

4. Effect of iodoacetate on respiration and glycolysis in excised rat brain. These experiments were undertaken as part of the general study of the effect of cold and of other inhibitors on mammalian-tissue metabolism. Specifically the present work was designed to provide further information concerning the interrelation of aerobic and anaerobic metabolism in excised rat brain. It was also designed to provide systematic data on the concentration-action and time-action relationships of iodoacetate in the inhibition of metabolism of the rat brain *in vitro*. Although iodoacetate has been used a great deal in the experimental analysis of the chemical pattern of tissue metabolism, these relationships had not been investigated in mammalian tissue over any considerable range of concentration and time. The effects were measured of graded concentrations of iodoacetate ranging from $5 \times 10^{-2}M$ to $1 \times 10^{-6}M$ on the oxygen consumption and anaerobic glycolysis of rat cerebral-cortex slices for three hours after addition of iodoacetate. All concentrations of iodoacetate tested which inhibited anaerobic glycolysis also ultimately inhibited oxygen consumption. Thus fermentation and oxygen uptake in excised rat cerebral cortex were not separable by treatment with iodoacetate.

5. Investigations were initiated in collaboration with Miss Nell Hol-

the Dudley Herbarium; Laurence Monroe Klauber, lecturer in natural history; Paul Robert Needham, lecturer (ecology); Lionel Albert Walford, lecturer in natural history; Albert W. C. T. Herre, curator of fishes; Roxana Stinchfield Ferris, assistant curator of the Dudley Herbarium; Margaret Hamilton Storey, assistant curator of zoölogical collections; Martha Edith Springer, acting instructor in biology (botany) and acting curator in the Dudley Herbarium (summer quarter); Charlotte Doty, museum assistant (Dudley Herbarium, summer quarter); Beryl Ruth Ellingson, museum assistant (zoölogical collections, summer quarter); Thomas Paul Maslin, museum assistant (zoölogical collections, winter, spring, and summer quarters); Chester Stojanovich, museum assistant (entomological collections, autumn, winter, and spring quarters); Mabel Weaver, secretary.

John Otterbein Snyder, emeritus professor of zoölogy, died on August 19. Professor Snyder carried on work in zoölogy, particularly in ichthyology, as an undergraduate, graduate student, and member of the Stanford faculty, under Dr. David Starr Jordan. He received the degree of Master of Arts from Stanford University in 1899 and was on the faculty continuously from 1897 until his retirement in 1932. During his long connection with the University he was intimately associated with advances in our knowledge of the ichthyology of the Pacific area and the development of its fisheries. His death removed a worker who was conversant with both theoretical and applied ichthyology from the ranks of Western zoölogists.

DUDLEY HERBARIUM

Acquisitions.—The total number of mounted and numbered cryptogamic and vascular plants was increased to 296,484 through the addition of 9,621 sheets of flowering plants and ferns and 1,525 sheets of mosses. Specimens accessioned numbered 9,319, including gifts, collections made by members of the staff, purchases, specimens sent in exchange, and those sent in for determination.

The number of specimens, 2,962 sheets, acquired through exchanges with other institutions and individuals dropped to less than half the number secured in this manner during the previous academic year. Curtailment of travel and transfer of many botanists to government agencies and the Armed Services are responsible for the drastic reduction in botanical field work.

Gifts.—Ernest G. Dudley and Helen L. Dudley gave \$100 for the purchase of missing numbers in the set of *Curtis's Botanical Magazine*, or to further the publication of botanical papers issuing from the Dudley Herbarium. An order for the missing volumes has been placed with a London dealer and it is expected that at least some of the needed numbers will soon be available through the generosity of Mr. and Mrs. Dudley.

Gifts of herbarium specimens included 239 sheets of plants from Europe and western North America, including one type specimen of *Penstemon*, presented by the Carnegie Institution of Washington; 84 specimens from California presented by Dr. Rimo Bacigalupi; 84 specimens of lichens donated by Dr. Albert W. Herre; 97 specimens from the eastern United

metabolism of the central nervous system on the vascular responses of the rabbit's ear.

During the year two papers based on work previously completed were published, one with Instructor Margaret L. Turner, on the effect of removal of the greater part of the lymphoid system on the weight of the part remaining *in situ*, appeared in the *Anatomical Record*; the other, on the influence of respiration on the heart rate with Messrs. J. and A. Lewis, in the *Proceedings of the Society for Experimental Biology and Medicine*.

Professor Hall again served as associate editor of the *Annual Review of Physiology*, Volume V of which appeared during the year. In spite of war conditions, the *Review* continues to prosper.

During the year Professor Hall was appointed associate editor of the *Stanford Medical Bulletin* for the campus. He contributed to this publication a review of Drinker's *Lane Lectures* and of Drinker and Yoffey's book, both on the lymphatic system.

The chief research activity of Professor Weymouth was concerned with the carrying out of an O.S.R.D. contract on visual perception of distance. In this his chief assistant has been Mr. J. M. Hirsch, a graduate of the Department of Optometry of the University of California. Much of the time has been devoted to the designing of a laboratory with variable lighting and other necessary features and to the designing and constructing of special apparatus. An extensive series of preliminary observations has been made and these data are being analyzed. Progress is satisfactory, but, because of possible military significance, findings cannot be released.

Professor Weymouth has co-operated in various departmental researches as consultant in the statistical aspects of the work.

F. W. WEYMOUTH
Professor of Physiology

NATURAL HISTORY MUSEUM

The teaching and curatorial staff of the Natural History Museum consisted of Ira Loren Wiggins, professor of biology (botany), director; Gordon Floyd Ferris, professor of biology (entomology), curator of the entomological collections; Walter Kenrick Fisher, professor of biology (zoölogy), curator of the invertebrate collections; George Sprague Myers,* professor of biology (zoölogy), head curator of the zoölogical collections; Willis Horton Rich,† professor of biology (zoölogy), curator of birds and mammals; Reed Clark Rollins,‡ assistant professor of biology (botany), curator of the Dudley Herbarium; Elmer Ivan Applegate, acting curator of

* Absent on leave for the entire academic year.

† Absent on leave, summer quarter.

‡ Absent on leave, winter, spring, and summer quarters.

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States and Utah collected by Mr. Reid Moran; 29 sheets of *Potamogeton* supplied by Dr. E. C. Ogden; 96 specimens from southern California presented by Mr. E. A. McGregor; and a number of smaller collections presented by other donors enumerated in the list of donors and their gifts.

Exploration and investigations.—Exploration during the year was reduced to two short field trips. One was made in May by Emeritus Professor Abrams, Professor Wiggins, and Mrs. Ferris to the ranch of Mr. and Mrs. Carl Janish near Willits, California. In July Mrs. Ferris made a pack trip into the southern Sierra Nevada back of Mineral King and collected topotype and other critical material from high mountain meadows.

Emeritus Professor Abrams made considerable progress on the preparation of the manuscript for Volume III of the *Illustrated Flora of the Pacific States*, and rechecked galley proof for Volume II, upon which work was taken up again by the University Press in August.

Professor Wiggins continued work on the manuscript for *A Flora of the Sonoran Desert* and published a paper on two new species of plants from Baja California, and another, jointly with Professor Rollins, on new species from Sonora, Mexico. He prepared a paper dealing with the representatives of the genus *Drymaria* in the Sonoran Desert region for publication in a memorial volume to Miss Alice Eastwood of the California Academy of Sciences.

Professor Rollins continued his researches on the Cruciferae through the autumn quarter and published a paper on *Halimolobos* in the *Contributions from the Dudley Herbarium*, and a second one jointly with Professor Wiggins as mentioned above. Early in January, 1943, he was granted a leave of absence from the University to assist in the work of the Guayule Research Project as Associate Geneticist in the United States Department of Agriculture. Since that time he has been stationed at Salinas.

Dr. Herre continued work on the preparation of a lichen flora of California. He determined large series of lichens from Marin County, Monterey County, San Bernardino County, and San Mateo County, California. As a result, he made extensive additions to the lichen flora of the state and our knowledge of lichen distribution in California was thereby greatly extended. He named collections from Sonora, Mexico; Quebec, Canada; Indiana and Oregon; and prepared reports for publication. He also studied many smaller collections from localities all over the United States.

Mrs. Florence W. Danforth continued her study of the genus *Linanthus* while working toward the degree of Master of Arts.

Part 8 of Volume 3 of the *Contributions from the Dudley Herbarium* was published in May and contained three papers, consisting of thirty-seven pages and eleven plates.

Herbarium specimens were sent on loan to the following institutions: Botanical Museum of Harvard University; California Academy of Sciences; Division of Agronomy, University of California; Iowa State College of Agricultural and Mechanical Arts; Los Angeles County Museum; State College of Washington; University of Arizona; University of California; University of California at Los Angeles; University of Oregon; University of Washington; and to Miss E. E. Morse of Berkeley, California.

John Anderson. He also searched out, identified, and catalogued many miscellaneous small series of material. Mrs. Beryl Ellingson gave full-time curatorial assistance during the summer quarter.

Miss Storey supervised all general curatorial work during the year, and revised the card file of books and separates for the Natural History Museum library.

Material for seven articles for the next two issues of the *Stanford Ichthyological Bulletin* was edited and prepared for publication by Miss Storey, during the absence of the editor, Professor Myers.

Research.—The research work of Professor Rich centered about the study of the salmon and salmon fisheries of the Columbia River. He continued to act as director of the Department of Research of the Fish Commission of Oregon and in this capacity had general supervision of studies relating to the pilchard and albacore fisheries of that state. A detailed study of the salmon runs of the Columbia River in 1938 was published during the year by the United States Fish and Wildlife Service and some advance was made in the extension of this study to include subsequent years. Additional experiments testing the effect of the Bonneville Dam on the survival of the young salmon during their migration to the sea were started, and the results of earlier experiments were collected and subjected to preliminary analysis. These follow previous findings in indicating a serious loss of down-stream migrants at, or above, the dam.

Professor Myers carried on ichthyological and herpetological work at the Museu Nacional at Rio de Janeiro.

Dr. Herre continued work upon the very large and important collections from the Oriental tropics made by him during 1940-41. Several papers describing new genera and species of Philippine and Indian fishes were completed and published; others, including papers upon rare and little-known fishes not hitherto collected in the Philippines and Malaya, were accepted for publication. Several revisions which would normally have been published in the *Philippine Journal of Science* were completed and are being held for the present; likewise, reports upon the collections from India cannot be published at this time. However, the determination of Indian specimens is proceeding and should be completed during the coming year.

Dr. William A. Gosline III returned in January from fourteen months overseas with the American Field Service Ambulance Corps in the Near East and North Africa and, while awaiting orders that will take him to Brazil as fisheries biologist for the Museu Nacional in Rio de Janeiro, completed identification of the specimens in the Scherer collections of fishes from eastern Peru, wrote two papers for publication in the *Stanford Ichthyological Bulletin*, worked on an artificial key to the families of South American fresh-water fishes, made skeletal studies in connection with working out a phylogeny of South American characins, and revised his catalogue of Neotropical catfishes, now being published by the Museu Nacional at Rio de Janeiro.

Mr. Maslin continued his studies of the pit-viper genera *Bothrops* and *Trimeresurus* and commenced an anatomical study of the head of the snake.

Mr. John C. Marr, in addition to his ichthyological work under Professor Rich, completed the study of the herpetological specimens collected in the

Bulletin, and the former is to be offered as a Master's thesis. Miss Doris Standish has undertaken an investigation of the slippery sole (*Microstomus pacificus*) based on samples collected by the California State Division of Fish and Game during the course of experimental fishing off the coast of California. Mr. Alexander E. Culbertson continued his ecological study of the Fresno kangaroo rat (*Dipodomys nathatoides exilis*).

Professor Rich gave several mathematics courses in the Army Specialized Training Program at Stanford. In July he was granted leave of absence to enable him to accept a War Service appointment with the United States Fish and Wildlife Service as Administrator of Fishery Production in the Office of the Coordinator of Fisheries. His immediate duties are in connection with the administration of the Coordinated Pilchard Production Plan designed to provide maximum production of this important fishery for lend-lease and essential military and civilian needs.

Earl Stannard Herald received the degree of Doctor of Philosophy. His thesis on the classification of the American syngnathid fishes, begun under the direction of Professor Myers, was completed under Professor Rolf Bolin of the Hopkins Marine Station of Stanford University. Dr. Herald entered the Army late in March and is now a lieutenant in the Medical Corps.

Dr. Herre presented lectures to Army students at Stanford in the Far Eastern Area and Language Unit.

Professor Myers, who has been in Brazil since July 1942, is continuing his work there under the auspices of the Committee for Inter-American Artistic and Intellectual Relations. Among the special subjects in which he has been able to give aid and assistance are: methods of collecting and preserving fishes for scientific study; museum methods of caring for and studying fishes; the editing of scientific papers; methods of publication of scientific books and serials; civil service examinations and standards for biological workers; and many details in museum administration. During March, April, and May, he presented a lecture and laboratory course on the classification of Brazilian fishes and North American concepts and methods in fisheries biology and conservation. This course was given at the Museu Nacional in Rio de Janeiro and was attended by about twenty Brazilian fisheries workers, ichthyologists, and zoologists. Many of the students were from distant parts of Brazil. Professor Myers was also called upon by the Rio de Janeiro office of the Coordinator of Inter-American Affairs to give advice and assistance relative to Brazilian-American negotiations concerning the increase of food-fish production in Brazil, and he assisted the director of the Museu Nacional in formulating plans for the use of the museum personnel in the Brazilian war effort. On September 15, 1942, he spoke before the Sociedade de Biologia do Brasil on "The Influence of Louis Agassiz on the Ichthyology of Brazil," and this address has been published by the Sociedade.

Curatorial.—Work on the zoological collections progressed steadily but very slowly owing to the sharp limitation of personnel. Mr. Maslin worked on the herpetological collections on a part-time basis during three quarters. He completed the cataloguing of the large series of reptiles and amphibians collected in the Great Plains states during the spring and summer of 1942 by Mr. John C. Marr, Mr. Earl S. Herald, Mr. Stanley Jewett, Jr., and Mr.

ens of the gobiesocid *Arabaciosa humeralis* (Gilbert) from Tiburon Island, Gulf of California. Dr. L. A. Walford gave the Museum a dried head of a new species of hammerhead shark from San Marcos Island, Gulf of California. Through Dr. Paul R. Needham of the United States Fish and Wildlife Service, Trout Investigations, at Stanford, came a large collection salmonoid Pacific Coast fishes. Miss Anita Daugherty brought a collection marine fishes made at San Pedro.

Professor Myers reports the arrival in Rio de Janeiro, for safekeeping till after the war, of another large collection of fishes made for the Museum

Mr. W. G. Scherer, of Pevás, Peru. Included in the shipment were about twenty reptiles and amphibians, several not to be found in museum collections, and about thirty vertebrate fossils, mostly of fish and alligator remains from the Tertiary Pebas Formation.

Among the material received in exchange should be mentioned 14 specimens of 13 species of African frogs, collected by Mr. A. Loveridge in Uganda, Tanganyika Territory, and Kenya Colony, and a specimen of *Rana goliath* from South Cameroon, received from the Museum of Comparative Zoology, Cambridge, Massachusetts. An open exchange has been maintained with several institutions, including the University of Michigan Museums and the United States National Museum.

Co-operation with other investigators and institutions.—The Bureau of Fish Conservation and the Bureau of Marine Fisheries, of the California Division of Fish and Game, and the Trout Investigation of the United States Fish and Wildlife Service continued to occupy quarters provided by the Museum and to make use of such facilities as the Natural History Museum library and collections.

Loans of material for study were shipped to a number of investigators, including several lots of fishes to Dr. R. R. Miller at the University of Michigan, a large series of *Hesperoleucus* to Mr. Garth Murphy at the University of California, a paratype of a shark to Drs. Barbour and Schroeder at the Museum of Comparative Zoology, Harvard University; a number of herpetological specimens were loaned to the Palo Alto Junior Museum, several snakes to Dr. Homer M. Smith of the University of Rochester, lizards to Major Chapman Grant of San Diego, series of king snakes, sidewinders, boas, and geckos to Dr. L. M. Klauber of San Diego.

Among the visiting investigators for whom space and facilities were provided at the Museum for varying periods were Mr. Garth Murphy of the University of California, Mr. W. I. Follett of Oakland, Mr. Charles B. Wade of the United States Fish and Wildlife Service, Dr. Wilbert M. Chapman of the California Academy of Sciences, Dr. L. M. Klauber of San Diego, and Dr. and Mrs. Carl L. Hubbs of the University of Michigan. Civilian and military representatives of the Army area studies groups have made use of our library, and especially of the library and experience of Dr. Herre.

Meetings, honors, etc.—Dr. Albert W. Herre served as president of the Western Division of the American Society of Ichthyologists and Herpetologists.

IRA L. WIGGINS, *Director*

GRADUATE SCHOOL OF BUSINESS

The Graduate School of Business completed its eighteenth year as of August 31, 1943. During the year, the resident faculty consisted of Jacob Hugh Jackson, professor and dean; George William Dowrie, Paul Eliel, David Ernest Faville, Paul Eugene Holden, Theodore John Kreps, Eliot Grinnell Mears, and Edward Kellogg Strong, Jr., professors; Barrett Frederick McFadon, associate professor; Jesse Knight Allen, assistant professor; and Henrietta Kathleen Carpenter and Lillian Caroline Owen, instructors. Professors Harry John Rathbun of the School of Law continued to serve as a regular member of the faculty and to give regular instruction in the Graduate School of Business. Professor Paul Eliel also continued to serve as director of the Division of Industrial Relations.

During the spring quarter, Mr. Martin H. Gerry III, purchasing agent for the University, served as lecturer in purchasing, and Mrs. Florence M. Edmondson was teaching assistant in secretarial science. During the summer quarter Dr. Oliver Erasmus Byrd, associate professor of hygiene and physical education, gave regular instruction in the Graduate School of Business. Mr. Almon F. Manspeaker, investment analyst for the Stanford Board of Trustees, was designated as lecturer in investments. During the winter quarter Dr. Vern James of the faculty of the Menlo Junior College served as lecturer in statistics and gave the course in business statistics. Dr. Ronald K. Campbell served throughout the year as acting assistant professor of personnel management and served as liaison officer between the Graduate School of Business and the ESMWT program of the University.

Mr. Edwin Truman Coman, Jr., the librarian of the Graduate School of Business, was absent on leave throughout the year as an officer in the Air Forces of the United States Army. Professor Kreps likewise was absent throughout the year in government service in Washington, D.C., serving first with the Board of Economic Warfare and later with the Office of Economic Warfare. Dr. Allen was absent on leave from January 1, 1943, serving with the Office of Price Administration in Washington.

Miss Owen continued to serve as executive secretary of the School while Mrs. Edith F. Glikbarg served as assistant librarian, and Miss Carol Remele as secretary and assistant librarian in the Division of Industrial Relations. As of the close of the academic year, Mrs. Elizabeth F. Thayer and Mrs. Louise F. Thursby served as secretaries and office assistants.

On Sunday, October 18, 1942, Dr. Norman J. Silberling, who had served the School as professor of business research since September 1935, died very suddenly from a heart attack. He had been granted a leave of absence for the autumn quarter to complete his book *The Dynamics of Business*, which represented many years of research in the field of business fluctuations and embodied Dr. Silberling's philosophy respecting this important field. Dr. Silberling, although an inspiring teacher, found his greatest satisfaction in the field of financial research and in what he chose to call the sphere of business dynamics. His book in this field, which fortunately had been completed with the exception of minor revisions in the latter chapters in the

galley proofs, is an outstanding contribution and will serve as an enduring monument to a brilliant scholar and an untiring worker.

In addition to the resident faculty and staff listed above, the following prominent executives on the Pacific Coast were consulting members of the faculty: Paul Stuart Armstrong (general manager, California Fruit Growers' Exchange), James Byers Black (president, Pacific Gas and Electric Company), S. Waldo Coleman (president, North American Investment Corporation), Paul Lewis Davies (president, Food Machinery Corporation, San Jose), Ralph Kenneth Davies (Deputy Petroleum Co-ordinator, Department of the Interior, Washington, D.C.), A. Campbell Galbraith (director of industrial relations, Douglas Aircraft Corporation), Don Earl Gilman (vice-president, National Broadcasting Company), H. King Hathaway (consultant in organization and management), David Heggie (vice-president and director, Shell Oil Company, Incorporated), Colonel Alexander R. Heron (director of industrial relations, Crown Zellerbach Corporation), Richard Hilliard (vice-president, The Paraffine Companies, Inc.), George Roscoe Keast (partner, Lybrand, Ross Bros. & Montgomery), Roger Dearborn Lapham (chairman of the board, American-Hawaiian Steamship Company), Jacob Bertha Levison (chairman of the board, Fireman's Fund Insurance Company), Joy Lichtenstein (vice-president, Hartford Accident and Indemnity Company), Edward Crossley Lipman (vice-president and managing director, The Emporium), Frederick Lockwood Lipman (chairman of the board, Wells Fargo Bank & Union Trust Co.), George Dunlap Lyman (practicing physician and lecturer in pediatrics, Stanford Medical School), Atholl McBean (chairman of the board, Gladding, McBean & Co.), Ernest Boyd MacNaughton (president, First National Bank of Portland, Oregon), William Adam Magee (president, Thomas Magee & Sons), George Vernon Orr (vice-president, Chrysler Motors of California), Neil Petree (president, Barker Bros., Los Angeles), Samuel Pond (former vice-president and treasurer, Marine Chemicals Company, Ltd.), Arthur B. Poole (vice-president and director, American President Lines, Ltd.), Paul Ainsley Sinsheimer (counselor and dealer in investments), Colonel Dean Witter (partner, Dean Witter & Co., San Francisco), Arthur Howland Young (formerly vice-president, United States Steel Corporation), consulting professors; Albert Henry Baker (formerly vice-president, The Simmons Company), William Herbert Carr (comptroller, California Packing Corporation), Mortimer Fleischhacker, Jr. (president, Chemicals, Inc., San Francisco), Clifford Ernest Schink (vice-president and treasurer, California and Hawaiian Sugar Refining Corporation, Ltd.), associate consulting professors; and Douglas Raymond Fuller (vice-president, North American Investment Corporation), and Benjamin Franklin Warren (chief industrial engineer, Columbia Steel Company), assistant consulting professors.

It is appropriate again to state that throughout the year these consulting professors have given freely and whole-heartedly of their time and wide and varied experience whenever requested by the School. They have been most helpful both in their advice on school policy and in their actual contributions to the classes of the School. The Graduate School of Business is most fortunate to have the friendship and aid of this group of outstanding business leaders.

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On Sunday, October 18, 1942, Dr. Norman J. Silberling, who had served the School as professor of business research since September 1935, died very suddenly from a heart attack. He had been granted a leave of absence for the autumn quarter to complete his book *The Dynamics of Business*, which represented many years of research in the field of business fluctuations and embodied Dr. Silberling's philosophy respecting this important field. Dr. Silberling, although an inspiring teacher, found his greatest satisfaction in the field of financial research and in what he chose to call the sphere of business dynamics. His book in this field, which fortunately had been completed with the exception of minor revisions in the latter chapters in the

Of these 42 degrees, nine were conferred at the conclusion of the summer quarter, nine at the conclusion of the autumn quarter, fourteen at the conclusion of the winter quarter, and ten at the conclusion of the spring quarter. The twenty-one M.B.A. degrees were conferred upon twenty men and one woman, making a total of 684 M.B.A. degrees awarded since the establishment of the Graduate School of Business in September 1925, these degrees having been awarded to 670 men and 14 women.

In addition to this regular and special academic work, the Graduate School of Business also participated actively in the special Engineering, Science, and Management War Training program participated in by Stanford University. During the academic year, there were 2,222 enrollments in courses conducted under the auspices of the Graduate School of Business, and the Dean of the School signed 1,011 certificates certifying the satisfactory completion of these courses. During the spring quarter a full-time intensive course was provided on the campus in the broad field of industrial management in which forty-three older business men were enrolled. A similar course was given during the summer quarter in which twenty women were enrolled, together with a second course in industrial accounting for younger girls in which an additional twenty high-school graduates were enrolled for a twelve weeks' period. These courses have not only enabled many individuals to gain valuable instruction but have also served to bring hundreds of individuals into contact with Stanford University and have made many friends for the institution. They have resulted in unusually fine institutional relations with the public at large.

Although both individuals and organizations have been giving most of their time to the national war effort during the year under review, a number of meetings of the alumni groups in Los Angeles, San Francisco, and Washington were held during the year. The alumni club in San Francisco held a meeting on September 23 at which Mr. Julean Arnold, for forty years in the United States government service in the Orient, was the guest speaker. On February 24 the annual meeting of the club was held, at which officers were elected for the ensuing year, and members of the faculty were guests. A third meeting on June 23 was addressed by Mr. Hugh A. Matier of the Union Oil Company of California. In Los Angeles a luncheon meeting was held on November 20, at which Dean Jackson spoke to the members of the group upon current activities of the School and of the University. On the evening of May 20 a dinner meeting was held at which Mr. Courtlandt S. Gross, president of the Vega Aircraft Corporation, spoke to more than sixty-five of the alumni of southern California. Both Dean and Mrs. Jackson were present at this dinner meeting. On Wednesday evening, July 14, Dean Jackson met with approximately twenty-five alumni at the Hay Adams House in Washington, D.C. Present at this dinner were also two members of the resident faculty and two members of the consulting faculty, Colonel Alexander R. Heron and Deputy Petroleum Co-ordinator Ralph K. Davies. Everywhere a fine spirit was found to exist among the alumni of the School, with splendid service being rendered to government, to industry, and in the Armed Services of the nation.

Because of the war conditions and the greatly reduced enrolment in the

Graduate School of Business, the annual alumni dinner held each year on the Stanford campus was omitted. Alumni, faculty, and friends are genuinely anticipating the return of normal conditions making possible the friendly fellowship so characteristic of these annual campus dinners.

The Business School Loan Fund had a balance of \$6,278.20 as of August 31, 1942. During the year under review the fund was increased by \$433.50 of gifts from alumni and friends, and interest accretions of \$119.83, making a balance as of August 31, 1943, of \$6,831.53. On August 31, 1943, there were outstanding thirty-two notes of eighteen individuals aggregating \$4,170 of loans and leaving a balance available for the new year of \$2,661.53. This loan fund continues to be one of the most valuable assets of the School, and the need for it will greatly increase with the return of peace and the rapid increase in enrolment contemplated at that time. This fund, it is well to remember, was established in 1932 by the students themselves, who raised and presented to the School the sum of \$200 to aid deserving and needy students.

The two business conferences, one held the last week in March under the auspices of the Division of Industrial Relations and the other in July as a general activity of the Graduate School of Business, were not held during the year under review. Housing facilities at the University and the pressure of war work made it impossible to hold these meetings which have been so enthusiastically received by business men on the Pacific Coast. It is very much hoped that these conferences may be taken up again immediately following the close of the war.

A notable volume was added to the Business Series published under the auspices of the School. This was *Vocational Interests of Men and Women* by Professor Edward K. Strong, Jr. It represents the results of eighteen years of painstaking research and is undoubtedly one of the most important publications that has ever appeared in that field of human activity.

The other publications of the Graduate School of Business have continued to sell satisfactorily during the year. There has been an especially good demand for copies of *Top-Management Organization and Control*, and it is contemplated that from year to year additional volumes will appear in the Business Series. The authors of these volumes are not only leading scholars in their fields but are men of mature judgment and long experience in dealing with essential business problems.

Volume XII of the *Business School Alumni Bulletin* was issued three times during the academic year under review. Each issue consisted of approximately twenty pages of mimeographed material containing a leading article, faculty and alumni notes, reference to new materials appearing on business subjects, and various matters of interest to our alumni and former students. This alumni bulletin continues to serve as a medium of keeping alumni, former students, and friends of the School informed of current activities and worth-while developments.

Through the interest and generosity of business and other friends, the Business School Library has continued to grow even during the war period. The library now contains in excess of 9,200 volumes and 93,000 pamphlets and government and corporation annual and quarterly reports. Acquisitions

for the 1942-43 fiscal year amounted to 384 volumes (225 by purchase and 159 by gift), 839 annual and quarterly corporation reports, 54 miscellaneous corporation reports, 662 governmental and university bulletins and serial publications, and approximately 900 miscellaneous pamphlets. Nearly 650 financial, labor, trade, and business publications (315 in the Division of Industrial Relations) are currently received. In addition several financial and labor services are received in the library of the School.

During the year a number of very fine gifts were received by the Graduate School of Business Library. Mrs. Norman J. Silberling presented to the library all of Dr. Silberling's professional books, together with a vast quantity of reports, charts, and other statistical material which he had accumulated over many years. Also Mrs. James Reed presented to the library a large quantity of the materials accumulated by the late consulting professor, James Reed. These two gifts are especially appreciated, not only because of the intrinsic value of the materials themselves, but even more because they came from the families of these two men who have contributed so much over the years to the School.

Money gifts during the year included an additional \$1,500 from Mr. George R. Keast to be added to the endowment of the George R. Keast Library Fund, \$250 from Mr. Albert H. Baker who established the Albert H. Baker Book Fund, \$75 from Mr. and Mrs. William Herbert Carr to be added to the William Herbert Carr Book Fund, \$100 from William G. Mackenzie (M.B.A., 1937) to purchase books on business history and geography, and a number of smaller money gifts. Gifts of books and other materials were received from more than forty individuals, companies, and associations. The usefulness and value of the Business Library were thus materially increased during the year under review.

Other gifts include the \$1,000 received from the Commercial Credit Company for two \$500 scholarships in the Graduate School of Business, \$750 from McKinsey & Company for a research scholarship, \$851.31 from the Social Science Research Council to support Professor E. K. Strong's study of public administrators, \$114.50 for the Business School Loan Fund, and \$297 for the general use of the School. This last sum has not yet been allocated to any special activity of the School.

On Monday evening, April 5, at a dinner meeting of the Purchasing Agents Association of Northern California, Inc., the annual Davis B. Gray Memorial Award was presented to Mr. Dix M. Jones (A.B., Brigham Young University, 1931; M.B.A., Stanford, 1943). This award was established in honor of Mr. Davis B. Gray, for many years the purchasing agent of the California and Hawaiian Sugar Refining Corporation, Ltd., and one of the early organizers and a former president of the Purchasing Agents Association. It is given to a student in the Graduate School of Business who, in the opinion of a joint committee of the faculty and of the Purchasing Agents Association, shows the greatest promise in the field of purchasing. The name of each year's winning student is engraved on a plaque hanging in the library of the Graduate School of Business, and the winner is presented with a beautiful gold watch properly engraved by the Purchasing Agents Association. It is a fine recognition both of the type of student registered in the Graduate

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as a member of the University Radio Program Committee and of the Stanford Fund Annual Appeal Committee, and as faculty representative on the Student Drives Committee. He also served as a member of the Committee on University Services and as chairman of the Sub-Committee on Regional Survey. He was editor of the *Alumni Bulletin* of the Graduate School of Business and chairman of the Scholarship Committee of the School. He has also served as a principal economist consultant for the Office of Civilian Requirement in the Distribution Branch of the War Production Board, as a member of the Research Committee on Changing Pacific Coast Markets of the Pacific Advertising Association, as a member of the Domestic Trade Committee on Postwar Planning of the San Francisco Chamber of Commerce, and as a member of the Research Committee on Postwar Planning for the California State Chamber of Commerce. He also served for the fifth consecutive year as a member of the Board of Directors of the San Francisco Sales Managers Association. During the year he spoke at the Stanford Alumni Conference in San Francisco, the annual convention of the California Retail Jewelers Association, the San Francisco Chapter of the American Marketing Association, the San Francisco Advertising Club, the Central California Scholastic Press Association, and various service clubs. He participated in a panel discussion on Pacific area markets at the War Emergency Conference of the Pacific Advertising Association, in one of the round table discussions of the California Council of the Air over KSFO and in a School of Humanities Symposium program on the Stanford campus. He published three short articles during the year.

Professor Holden continued to serve throughout the year as a member of the University Committee on Public Exercises and on various committees of the Graduate School of Business. He was a member of the American Society of Mechanical Engineers Committees on General Management, Honors and Awards, Administrative Organization, and Work Standardization. He also served as a member of the Committee on Problem No. 6 of the Central Valley Project Studies. He was a director of the Stanford Convalescent Home, a member of the Board of Trustees of Castilleja School, and a director of Schick, Inc. During the year he was elected to the Board of Governors of the Stanford Associates and supervised and conducted courses under the ESMWT program of the University.

During the year under review Dean Jackson served as chairman of the University Committee on Wartime Courses for Stanford Women and continued to serve as president and as a director of the Stanford Bookstore. He also served throughout the year as a trustee and member of the Executive Committee of the Pacific School of Religion and in June was elected a trustee of Simpson College. Throughout 1942 he served as governor of the California-Nevada District of Kiwanis International and as a member of the District Board of Trustees. He was a member of the Committee on Post-War Economics of the California State Chamber of Commerce and chairman of the Subcommittee on Research and Planning. During June and July he spent six weeks in the East visiting large corporations, studying the organization and functioning of the comptroller's, secretary's, and treasurer's departments. He served as a special consultant on business administration matters

School of Business and of the co-operative relationship which exists between the School and various business organizations.

During the academic year under review, the faculty of the School, whether in residence at the University or in government or war work elsewhere, took an active part in the affairs of the nation or of the communities where they were located. The publications of the faculty are reported separately in this report, while their more general activities are presented in the following paragraphs.

During the autumn quarter Professor Allen was in residence at the University and, in addition to his campus work, taught cost accounting under the ESMWT program in San Francisco and also a class at Stanford. Since January 1, 1943, he has been on leave of absence while serving with the OPA in Washington, D.C. After three months as a principal business analyst in the Fuel Rationing Division, he became rationing executive and chief of the Heating and Cooking Equipment Rationing Branch of the OPA. In this capacity he has been in charge of developing and administering a nation-wide distribution and rationing program for domestic heating and cooking stoves which became effective in the latter part of August, 1943. During the year he has spoken before governmental groups and before a number of meetings of manufacturers, distributors, and retailers in principal cities of the United States.

Mr. Edwin T. Coman, Jr., librarian of the Graduate School of Business, has served throughout the year as an officer in the United States Army Air Corps. He was given leave of absence from the University to enter the military service and is presently located at the Air Corps Gunnery School, Las Vegas, Nevada.

Professor Dowrie served during the year as a member of the Advisory Board and of the University Committee on Research. In addition to his regular work in the Graduate School of Business, he lectured in an electrical engineering seminar and in two courses on war problems sponsored by members of the faculty of the Department of Economics. He conducted sessions at the alumni conferences in Los Angeles and San Francisco and participated in a panel discussion on postwar planning at the Northern California Postwar Conference of the National Association of Manufacturers. He spoke on war and postwar financial problems before the California Editors Association, the Comptrollers Institute of San Francisco, the Waverley Club, the Wholesale Credit Association of San Francisco, and before five service clubs. He contributed the section on American banking to *Economic History of the United States*, edited by Professor Williamson of Yale University and now in press at Prentice-Hall, Inc.

Aside from his activities in the Graduate School of Business, Professor Eliel has given very largely of his time during the year under review to the Pacific Coast Maritime Industry Board of San Francisco of which board he has been chairman. He participated in two arbitrations, has spoken before a number of organizations during the year, and has published two short articles.

Professor Faville continued to serve during the year as chairman of the University Committee on Publications, as a director of the Stanford University Bookstore, as faculty adviser to the Stanford Wholesale Commissary,

Thus are recorded the activities of the Graduate School of Business and of the members of its staff during its eighteenth year of active operation. Although very unsettled conditions resulted from the World War, the School has continued to carry on an active program of work. The special training of students in the field of secretarial science, the offering of courses to seniors in a pre-business major program, and the concentrated program leading to the degree of Industrial Administrator upon the completion of four continuous quarters of work have all been part of the School's special activities during the year under review. Special full-time courses under the University Extension program were given on the campus during the autumn and summer quarters, and members of the faculty have in addition both taught and supervised other such courses in San Francisco and on the campus. The School has kept intimately in touch with its several hundred alumni engaged in war-industry work or serving in the Armed Forces of the nation and also conducted special courses for the training of students in the Advanced ROTC-Quartermaster program. The faculty has also given consideration to the post-war program of the School and to the part which it can play in the great rehabilitation period immediately following the World War. Notwithstanding the difficulties encountered by the School at present, we look forward to a period of growth and development following the war which will exceed anything known by the School to date.

J. HUGH JACKSON

*Professor of Accounting, and
Dean of the Graduate School of Business*

SCHOOL OF EDUCATION

The faculty of the School of Education consisted of the following persons: Professors Warren D. Allen,* John C. Almack, Norman Fenton, Paul R. Hanna, Grayson N. Kefauver, and Helen Benton Pryor;* Associate Professors Oliver E. Byrd,* Arthur A. Esslinger,* Rex F. Harlow,* Maud Merrill James,* Walter V. Kaulfers, Lucien B. Kinney, Maud L. Knapp,* James Quillen, and Holland D. Roberts; Acting Associate Professor Roger G. Barker;* Assistant Professors R. Will Burnett, Daniel M. Menlelowitz,* Lawrence G. Thomas, and H. D. Winbigler;* Acting Assistant Professors Robert N. Bush, Ralph Fields (spring and summer), Lavone A. Hanna, Edward A. Krug, and Gladys L. Potter (summer); Instructor Clarence Fielstra; Acting Instructors Chester Babcock (summer), Wilbur Dutton (spring), Paul DeHart Hurd (spring and summer), and Helen Rachord (summer).

Faculty members on leave were the following: Lieutenant Reginald Bell, Training Films Section, Photographic Division, Bureau of Aeronautics, U.S. Navy, Washington, D.C.; Lieutenant Commander Alvin C. Eurich, Officer in Charge, Standards and Curriculum Section, Training Division, U.S. Navy, Washington, D.C.; and J. Paul Leonard, Chief of the Group Services

* Also a member of the faculty of another division of the University.

Branch, Department of Information, Office of Price Administration, Washington, D.C.

Reginald White was teaching fellow in education; Robert Fox and Delmar Oviatt were teaching assistants; and Nancy Garrett Bouleware assisted in Girl Scout work.

The secretarial staff consisted of Elnora Davies, secretary to the Dean; Irene Willoughby, secretary for the School; Babette Doyle, credential secretary; Estalyn Kreps; and Ethel Suransky.

Eighty-six degrees were granted with majors in Education. Of these, 11 graduates received the degree of Bachelor of Arts, 57 the degree of Master of Arts, 17 the degree of Doctor of Education, and one the degree of Doctor of Philosophy. Two degrees of Doctor of Philosophy were granted with minors in Education.

Many of the students receiving degrees in Education completed the requirements for at least one of the California professional credentials as well; and many credentials were granted to students majoring in other divisions of the University. A total of 31 completed the work for the general secondary teaching credential, two qualified for the junior college credential, two were recommended for special secondary credentials, four qualified for the speech-correction credential, and 22 completed the work for the administration and supervision credentials.

The University entered into a co-operative agreement with the various state teachers colleges whereby Stanford University students may qualify for the general elementary credential. Four students started programs on this basis.

To meet the current demand for assistants and directors in nursery schools and in day-care centers for children, the School of Education, the School of Health (Women), and the Department of Psychology offered a co-operative program of from 32 to 34 units in nursery-school training.

The School of Education, in co-operation with the Civil Aeronautics Administration, offered a course in pre-flight aeronautics for secondary school teachers from May 1 to June 23 in San Francisco. The course was designed to re-train science, mathematics, and industrial arts teachers to offer high-school pre-flight training desired by the military services.

In order to assist teachers and administrators in coping with the complex and manifold problems of wartime, five workshops were organized for the summer of 1943:

The Workshop in Mathematics Curriculum and Instruction was perhaps unique in teacher-education projects in that it originated in a demand by the teachers themselves that such facilities be provided. At the Mathematics Teachers Institute held by the California Mathematics Council in December 1942, a need was recognized for more effective teacher-education programs—for bringing into mathematics classes teachers from other fields (now often called upon to teach mathematics) in order that they might become familiar with new materials, with the demand for new courses, and with the new requirements for mathematics courses now being offered. The directors of the California Mathematics Council requested that a summer workshop be offered at the School of Education.

Arrangements were made to bring in consultants from the Army, the Navy, the Air Force, industry, OPA, and other activities.

Library materials collected for the workshop were turned over to Cumberley Library, where they will be available for future workshops.

A grant of \$525.00 from United Airlines for scholarships and teacher education greatly facilitated the program of the workshop.

The Workshop in Science Teaching in the War was designed to serve three groups of educators: science teachers who wished to increase the effectiveness of their teaching contributions to the war effort; teachers inexperienced in the teaching of science who were or who would be instructing in the field owing to the increased emphasis and enrollment in this area during the war; and administrators, supervisors, and curriculum co-ordinators who wished to determine the maximum contributions of science instruction to war and postwar problems and the contributions of this field to their total educational programs.

Representatives of various branches of the Armed Forces and the home front were available to consult with workshop members on their programs in light of their future activities in the Armed Forces. Representatives of various essential industries were also available to consult on the science knowledges and skills desirable for successful employment in these activities.

The Workshop in Social Education for Victory and Postwar Reconstruction was designed particularly for social-studies and social-living teachers, core and general education teachers, and guidance and curriculum workers. Its purposes were to help participants develop their understanding of the major social and economic problems facing our nation in war and in the postwar period; to become familiar with new teaching materials of all types; to consider techniques and procedures in terms of which the major problems of our time may best be studied in the schools; and to prepare resource units and other pre-planned materials which could be used during the school year.

In the spring, the General Education Board sent a group of six fellows from the southeastern part of the United States to work with the staff of the Stanford Social Education Investigation. The fellowship group included representatives from colleges and high schools in Georgia, North Carolina, and Kentucky. The group stayed on during the summer to participate in the program of the Workshop in Social Education for Victory and Postwar Reconstruction.

In the Workshop in Elementary Education, emphasis was placed on the following problems: the elementary school and the war efforts in the local community; the role of the elementary school in providing supervision of children before and after school hours; modifications of curricula made necessary by civilian defense, military operations, wartime agriculture and industry; staff morale under increased teaching loads and increased responsibilities; the problem of decreasing budgets and rising costs of instructional materials; improvement and revision of science, arithmetic, language arts, health and physical education curricula.

The Communications Workshop served the purposes of mature, experienced teachers and supervisors with special projects in English, foreign languages, speech, and reading. Full use was made of the laboratory classes

of intermediate and secondary school children enrolled on the campus for work in reading, writing, and speech.

A two-day institute was also held in the summer to discuss educational problems in wartime as related to the following areas: administration, elementary education, guidance and mental hygiene, the social studies, the language arts, science, and mathematics. The various programs in the institute were organized around the immediate and crucial problems faced by teachers and administrators in the war emergency, and activities of each program were built around questions received from the field.

Reports on the Stanford Language Arts Investigation, *Foreign Languages and Cultures in American Education* and *English for Social Living*, were published by the McGraw-Hill Book Company of New York. Both books represent the co-operative effort of 150 teachers and administrators, 10,000 students, and the staff of the Investigation, working together in 28 secondary schools to advance the teaching of the language arts.

As a result of faculty group study of the adjustment of education to war and postwar needs, *Education in Wartime and After* was prepared by the faculty and published by the D. Appleton-Century Company of New York. Treated in the book are such topics as the goals and problems of the American people, the role of leadership in public education, education for national unity and morale, school and community in wartime, democratic human relationships, the wartime curriculum, personnel problems, school finance, problems of war-boom communities, vocational education, the world picture in wartime education, and postwar planning.

The publications of the various faculty members are listed elsewhere. In the following paragraphs other activities in addition to regular teaching duties are listed.

Professor Almack continued service as a member of the Board of Education of the Palo Alto Unified School District, and of the local committee on education for national defense. He was a member of the Administration Credential Committee, the Committee on Advanced Graduate Degrees, and the Library Committee of the School of Education.

Professor Burnett was a member of the executive committee and of the resolutions committee of the American Council of Science Teachers. In the School of Education, he was chairman of the Library Committee and a member of the Master of Arts Committee and the Committee on Teaching Credentials. During the spring and summer quarters, Professor Burnett was employed as Head Training Specialist in Science Education by the Civilian Pre-Induction Training Branch of the War Department. In this connection he did research in Army needs for pre-training, spent considerable time at various Army camps, and conferred with and addressed civilian education groups in various parts of the United States. He spent six weeks at the universities, colleges, and larger school systems in California, Oregon, and Washington presenting Army needs and possible programs of pre-induction training to schoolmen. Professor Burnett also fostered the organization of the National Committee on Science Teaching to consider wartime science problems. This is a council composed of elected representatives of each of the regional and national science teaching associations.

Professor Bush served in an advisory capacity to the Menlo High School faculty in their curriculum and instruction problems, and as a special consultant on teacher education to the Denver, Colorado, Public Schools. He spent two months in Denver and one month on the campus preparing materials for that work. The work consisted of gathering and organizing data on human relationships in the practical situation and using that material to work with the administrative and teaching staff of the school system. During the time in Colorado, Professor Bush worked with the chief executive officers and the faculties of the major teacher education institutions of the state to establish a program by means of which they could collaborate more effectively with the public school system. A proposal for the establishment of a consultation service for educational personnel was accepted by the institutions and the school system, to begin with the academic year 1943-1944. In August, Professor Bush resigned from Stanford University to take up his duties as Dean of Kansas State Teachers College, Emporia.

Professor Fenton served as director of guidance at the Menlo School and Junior College; consultant in delinquency prevention and mental hygiene of the California Youth Correction Authority, which included consultations with judges and staffs of juvenile courts and school systems in California in regard to the treatment of individual children with problems, and the more general needs of communities in regard to the prevention of crime and delinquency; as a member of the Board of Trustees of the Northern California Society for Mental Hygiene, the Northern California Council for Exceptional Children, the American Institute of Family Relations, and Co-ordinating Councils, Incorporated. He served as a member of the following national committees: Committee on Exceptional Children in Wartime of the International Council on Exceptional Children; committee on the introduction of clinical psychology into school systems, American Association of Applied Psychology, for which community case studies were prepared; committee on psychological work in state correctional schools, American Association of Applied Psychology; and committee on programs of training for socially maladjusted children, National Conference of Juvenile Agencies. He continued as consultant on delinquency prevention for the United States Children's Bureau. He served on the following committees in the School of Education: Guidance Credential Committee, Master of Arts Committee, and Library Committee. He gave lectures to educational groups in various parts of the state, and conducted a guidance workshop for the staff of the Monterey City Schools. As a member of the "Know Stanford" Committee of Stanford Associates, he conferred with persons interested in projects for the advancement of the University. As chairman of the faculty committee on rehabilitation training, he directed the program for the definition of certain aspects of Stanford's potential contribution to the personal and social readjustment of disabled veterans and civilians.

Professor Fielstra was general supervisor of student teaching and of the internship program. He was a member of various faculty committees of the School of Education, and sponsor of Delta Chapter of Phi Delta Kappa. In August, he resigned to take up his duties as Curriculum Co-ordinator for the Secondary Schools of San Diego County.

Professor Lavone Hanna did a limited amount of teaching, giving most of her time to work on the Stanford Social Education Investigation.

Professor Paul R. Hanna was consultant for the following: National Resources Planning Board; Advisory Committee on Latin-American Relations of the United States Office of Education; War Relocation Authority; and Army Specialized Training Division, War Department. He served as chairman of the editorial board of *Building America*; and of the Committee on Resources and Education, a joint project of the National Education Association, the Progressive Education Association, and the United States Office of Education; and continued responsibility as a member of the following: Advisory Board, Committee on Individual Guidance of the National Education Association; Advisory Board, National Safety Council; Advisory Committee of the Evaluating of School Broadcasts, a project of the General Education Board; Board of Editors, *World Book Encyclopedia*; Board of Editors, Association of Childhood Education; Board of Governors, and Planning Committee, California Housing and Planning Association; Committee on Curriculum Planning for Safety, of the National Safety Council; Curriculum Committee, National Council for the Social Studies; and Central Valley Investigations Committee. At Stanford he was Director of University Services; member of the Committee on Special Gifts, Trusts, and Bequests; chairman of the School of Education Committee on Advanced Graduate Degrees; chairman of the School of Education Postwar Planning Committee; and member of the Administrative Credential Committee. He spoke at the Northwestern Indiana Teachers Association, Gary, Indiana; at the Central Ohio Teachers Association, Columbus, Ohio; at the annual meeting of the Kansas State Teachers Association, Emporia, Kansas; and at the Inter-American Institute, San Francisco, California.

Professor Harlow conducted courses in public relations in San Francisco, New York, and Los Angeles; he spoke over the radio from San Francisco, New York, and Chicago; and addressed audiences in San Francisco, Chicago, Washington, New York, Pittsburgh, Atlanta, Los Angeles, and Salt Lake City. He was editor of the Harper Series of *Public Relations Studies*.

Professor Kaulfers was director of foreign languages in the Menlo School and Junior College; consulting editor in foreign languages for Scott-Foresman Company, Chicago, Illinois; associate editor of *Italica* and of *Hispania*; and general editor and co-author of the *Spanish American Series* of Henry Holt and Company, New York. He served on the Master of Arts Committee and the Library Committee of the School of Education, and continued responsibilities as co-director of the Stanford Language Arts Investigation.

Professor Kefauver carried administrative responsibilities as Dean of the School of Education during the autumn and summer quarters. He was on leave during winter and spring quarters to assume leadership in carrying forward studies in international education and to promote the establishment of an international education organization. Among the developments of this program of activity was the establishment of the Liaison Committee for International Education, composed of representatives of the education organizations with special interest in international education. Dean Kefauver was elected chairman of the executive committee of this organization. He con-

tinued to serve as chairman of the Yearbook Committee of the National Society for the Study of Education to prepare the 1945 yearbook, *Educational Administration*; president of the National Society of College Teachers of Education; chairman of the National Committee on Education for the War and Postwar Emergencies of the Progressive Education Association; consultant to the Educational Policies Commission; member of the Advisory Panel of the Public Service Division of the National Broadcasting Company; member of the Committee on Educational Policies of the National Conference of Christians and Jews, and chairman of the San Francisco Conference of Christians and Jews; member of the Editorial Board of the *California Journal of Secondary Education*, and *Understanding the Child*; member of the National Committee on Co-ordination in Secondary Education; member of the American Council of the Institute of Pacific Relations; and member of the California Committee on the Study of Education. In the University, he was a member of the Committee on Nutrition and Dietetics and the Exceptional Student Committee; co-director, with Professor Quillen, of the Stanford Social Education Investigation; and co-director of the Stanford Language Arts Investigation with Professor Kaulfers and Professor Roberts.

Professor Kinney was acting dean during the winter and spring quarters. He served as Deputy Regional Director, Army-Navy Qualifying Test for Civilians; was regional representative, National Council of Teachers of Mathematics; Executive Secretary, California Mathematics Council; and member of the American Education Research Association. He was director of the Institute on Mathematics Teaching in the Emergency, at Stanford, December 1942, and was instrumental in organizing the California Mathematics Council at that time. He was director of the Workshop in Mathematics Curriculum and Instruction in the School of Education during the summer; chairman of the Committee on Teaching Credentials; member of the Committee on Advanced Graduate Degrees, and of the Committee on Postwar Planning. He was a member of the Subcommittee on Manpower in California, of the Committee on University Services; and was Consultant in Mathematics for the Burbank City Schools.

Professor Krug was editor of *Education in Wartime and After*, written by the faculty of the School of Education. He did editorial consultation work for *Junior Britannica*, Encyclopedia Britannica, Inc., Chicago, Illinois, and did consultant work on curriculum problems with the Denver Public Schools. In August, he resigned to accept a position at Montana State University.

Professor Quillen served as first vice-president of the National Council for the Social Studies; as consultant to the Service Bureau for Intercultural Education to assist in the preparation of a series of books; as a member of the Joint Committee on Democratic Citizenship of the National Council for the Social Studies and the National Association of Secondary School Principals; as chairman of the Committee on Educational Sociology of the National Society of College Teachers of Education to prepare a chapter in their yearbook; and as consultant to public school groups in Burbank, Whittier, and San Rafael, California, and in Denver, Colorado. In the war program of the University, he served as Assistant Co-ordinator of Research for the Committee on University Services; as a member of the Committee

on Administration of the Army Training Program; and as an interviewer for the STAR unit. In connection with the School of Education program, he served as consultant in social studies at Menlo School and Junior College; as co-director of the Stanford Social Education Investigation; as chairman of the Master of Arts Committee; and as member of the Committee on Postwar Planning and of the Library Committee. His speaking engagements included the annual convention of the National Council for the Social Studies in New York City, and meetings of the Liaison Committee for International Education.

Professor Roberts served as chairman of the Publications Committee of the National Council of Teachers of English, as a member of the Commission on Long Range Planning, and of the Committee on College Reading; as chairman of the Committee on Curriculum Integration for the Society for Curriculum Study; as consultant for the California State Committee on Reading Development, sponsored jointly by the California Secondary Principals Association and the State Department of Education; participated in the editorial planning of the Association for Education by Radio and acted as chairman of the Committee on Research; and participated with Donald Winbigler in developing a program of co-operative school research with Mabel F. Gifford of the Bureau of Correction of Speech Defects of the California State Department of Education. He was curriculum consultant for the language arts and reading in-service programs in San Diego (city and county) and San Diego State College, and in Humboldt State College and Humboldt County; and served as director of the English curriculum in Menlo School and Junior College. He directed the organization of the Stanford Communications Workshop for the summer session, actively directing the operation of the program, and continued work as co-director of the Stanford Language Arts Investigation. He directed the Stanford in-service program, Reading Development I, and was a member of the following School of Education committees: Committees on Advanced Graduate Degrees, Summer Program, Summer Institute Programs, and Records.

Professor Thomas served as Assistant Co-ordinator of Research for the Committee on University Services; as Assistant Director, Stanford Civil Affairs Training School under the office of the Provost Marshal General; as a member of the faculty administrative committee handling the STAR program at Stanford; as a member of the faculty interviewing committee under the STAR program for the Army Specialized Training Program, with particular responsibility for selecting candidates for schools in foreign areas and language study; and as liaison officer for the course in pre-flight aeronautics for secondary school teachers, jointly sponsored by Stanford and the Civil Aeronautics Administration. He was a member of the executive board of the Philosophy of Education Society; representative at the meeting of the California Conservation Council, in San Francisco, May 1943; member of the Palo Alto Youth Council; and director of the Palo Alto Youth Council Recreation-Harvest Labor Survey, summer of 1943.

GRAYSON N. KEFAUVER, *Dean*

SCHOOL OF ENGINEERING

The war demands for engineering training have brought to the School of Engineering greatly increased activities. These activities include training of civilian students at both undergraduate and graduate levels, industrial- and government-sponsored research, short-course training for industry under sponsorship of the Engineering Science Management War Training of the United States Office of Education, and the Army Specialized Training Program for selected enlisted soldiers. The status of each of these activities will be discussed in the order listed above.

Training of civilian students has been continued on the accelerated four-quarter plan first inaugurated in the summer of 1941. Not all students can attend college without the assistance of summer earnings in industry. We have therefore arranged the scheduling of courses in so far as possible to provide for students following a three-quarter as well as a four-quarter program. Both programs involve the same twelve-quarter curricula leading to the degree of Bachelor of Arts in Engineering with specialization in Civil, Electrical, Mechanical, and Mining Engineering. Such dual scheduling has many difficulties and adds much to the faculty burden. Students are able to progress farther in their chosen major at some sacrifice of breadth of general education and breadth of engineering training.

Selective service has recognized the need for fully trained engineers to meet the pressing war needs of industry and the Armed Forces, but the directives have shown a continuing tendency to make civilian attendance of engineering students more uncertain.

The initial policy of Selective Service was to grant deferment to engineering students performing satisfactory work and keeping up with their classes. In June 1942 a directive was issued providing that engineering students who could graduate by July 1, 1945, should be deferred. This has now been supplemented by a directive which provides that an engineering student may be deferred who can graduate within two years of first request for deferment after reaching the age of eighteen. This protects some of the bright young students who have stayed in college under the continuous program and thus can graduate by the time they are twenty years of age. There has been no change in the directive which permits deferment of graduate students who are assistants in instruction or United States government-sponsored research.

The situation of the civilian student, however, is not a happy one and there has been increasing pressure to gain his induction into the Armed Services. During the year the campus was visited by Army, Navy, and Marine Corps recruiting officers competing for the enlistment of University students. By the end of the year more than half the upper-division engineering students had committed themselves to one or another of the military services with some expectation that they might have a fair chance of completing their undergraduate work.

In March 1943 all Army enlisted reserve men and all ROTC students except the second-year advanced students were called into active service. Now, after about six months' training, these men have returned as ASTP trainees for not to exceed two quarters of engineering training irrespective of their former majors.

Those who signed up with the Navy were called out to naval training schools on July 1, 1943, with the exception of those who could complete their undergraduate work by the end of the summer quarter.

The combined effect of the policies and programs of Selective Service and the Armed Forces has been to seriously deplete the civilian enrolment to a point where the numbers in upper division and graduate work will be a small fraction of the normal enrolment. These policies are unquestionably dictated by conviction that the war will be a relatively short one, for industry is critically short of well-trained graduate engineers, and the industrial output for war will suffer severe consequences if the war should continue for many years.

Substantial research projects are being carried on in the engineering laboratories, particularly in aeronautical engineering and in electrical engineering. So far we have been able to retain graduate students to participate in such research, but the immediate future appears uncertain with loss of so many students. The specific nature of research work cannot be revealed during the war.

Stanford has continued and expanded its participation in part-time and full-time training of engineers, chemists, and production supervisors for industry. These courses are financed by the United States Office of Education, under the Engineering Science Management War Training (ESMWT) Program. Course enrollment for 1942-43 was 6,887. These courses have been offered to meet the specific manpower shortages of the region.

Professor Eugene L. Grant, institutional representative for Stanford, has continued in general charge of the promotion, organization, and co-ordination of these courses. Elsewhere in the *President's Report* is a description of the Stanford ESMWT Program prepared by Professor Grant. The Dean of the School of Engineering has continued to serve as Regional Adviser for ESMWT, Region 20, Northern California and Nevada, and Regional Representative for War Manpower Region XII, Washington, Oregon, California, Nevada, and Arizona.

The Army Specialized Training Program (ASTP) began in advanced engineering on May 10, 1943, with approximately 200 trainees in what is known as Cycle II with 12-week quarters following the first of the second week of August, November, and February. On July 12 some of the trainees were transferred to Cycle I with 12-week quarters beginning the end of the second week of July, October, January, and April.

During the summer the School of Engineering was giving courses in three separate quarters, AST of May 10, civilian students of June 17, and AST of July 12, 1943. Fortunately, the University beginning in October 1943 will follow the AST Cycle I and the Army has agreed not to send additional trainees to Cycle II so Civil and Mechanical Engineering Term 6 will end with January, and Electrical Engineering with April 1944, completing Cycle II. Thereafter, all Army and civilian students will be on one four-quarter system, much to the relief of the School faculty.

The Army Specialized Training Program provides very congested limited curricula in engineering, shorter and more specialized than that heretofore given in any engineering college. Their three 12-week quarters of Basic

Engineering, for which high-school graduation is a prerequisite, are followed by three 12-week quarters in Civil Engineering and Mechanical Engineering, and four 12-week quarters in Chemical and Electrical Engineering. The courses are of college grade and regular college credit will be given. Owing to the total time being but six to seven quarters, no degree will be given on completion.

The trainees have in general been well selected on the basis of intelligence and general fitness with considerable variance in the adequacy of their prior training. Uncertainties in the numbers that will arrive in any field and the term they will enter has made difficult the planning for staff, texts, rooms, and laboratory equipment.

In general the AST and civilian engineering courses are given separately. The loads on the instruction staff are far in excess of any carried in peace times and if long-continued will have a very detrimental effect upon the development, effectiveness, and scholarly contribution of the faculty. Several of the emeriti have generously taken rather heavy teaching loads as it has been difficult or impossible to secure adequate instructors in competition with the much higher salaries of industry.

The new School of Engineering Library established during the previous year with Mrs. Hertha Bengtson serving as a full-time experienced librarian is filling a very important place in the School and has attracted a number of gifts. The Executive Committee of the School of Engineering appropriated \$1,000 of monetary gifts to the School for purchase of needed books.

Faculty changes are noted in the separate reports of the departments. Of our regular faculty, ten were on leave, seven as commissioned officers of the Army and Navy, and three directing research or other engineering war work. Their places have been difficult or impossible to fill in competition with opportunities in industry.

Laboratory space and equipment in a number of fields is short of present needs. Through lack of funds or priorities, or both, during these pressing times a substantial backlog of needed acquisitions is necessarily being built up for the postwar period. The new electrical engineering building addition had to be postponed owing to lack of needed priority even though authorized by the Board of Trustees.

Degrees.—There were 150 degrees granted in the academic year 1942-43, only seven less than in the prior year. The degrees were: Bachelor of Arts, 119; Master of Arts, 17; Engineer, 12; Doctor of Philosophy, 2. Loss of students to the Armed Forces will prevent any such sustained record for the remainder of the war period.

Research, publications, and other activities of the faculty.—These are given separately in the detailed reports of each of the departments of the School of Engineering.

Employment demands for engineering graduates so greatly exceed the available supply as to be a substantial factor in the manpower shortage. The Armed Services are securing a majority of the engineering graduates. Industry must have well-trained engineers to carry on its war-production program. For the duration it appears that the short-course "tailor-fit" training offered under the Engineering Science Management War Training Program will be

the major contribution of Stanford and other engineering colleges to relieve the engineering war manpower shortage that is especially critical on the Pacific Coast.

SAMUEL BROOKS MORRIS
Dean, School of Engineering

CIVIL ENGINEERING

Personnel.—The active faculty of the department for the year 1942-43 consisted of the following: Eugene Lodewick Grant, Samuel Brooks Morris, Leon Benedict Reynolds, Earl Charles Thomas (on leave beginning January 1, 1942), James Bertrand Wells, professors; Paul J. Beard, Harry Andrew Williams, Donovan Harold Young, associate professors; Eugene Valentine Ward, lecturer; Mary Alice Sullivan, department secretary; O. G. Warm, laboratory mechanic. Professors emeriti were John Charles Lounsbury Fish, Halcott Cadwalader Moreno, Charles Moser, and Charles Benjamin Wing.

Staff activities.—Professor Paul J. Beard has continued in charge of sanitary engineering laboratories. During the year he carried on research of effect of silver on cysts of *entamoeba histolytica*. He is preparing for publication a paper on comparative bactericidal effects of chlorine and bromine, and effect of organic matter on chlorine residuals. Owing to impairment of vision, he has not engaged in outside activities during the past year.

Professor Eugene L. Grant served as vice-president, San Francisco Chapter, American Statistical Association, and as member of the Committee on Engineering Economy, Society for Promotion of Engineering Education, both for entire year. Also, served as member of Central Valley Project Studies Committees on Problem 14 (distribution of project power by public agencies) and Problem 15 (power rates); Institutional Representative, Engineering, Science, and Management War Training; organized and served on instructional staff for four ESMWT courses for production and inspection executives of West Coast war industries in Quality Control by Statistical Methods. These full-time courses of 8 to 10 days' duration were held at Stanford in July 1943, in Los Angeles in September 1942 and June 1943, and in San Francisco in June 1943. They served to introduce the *Shewhart Control Chart* techniques to the Pacific Coast, resulting in many hundreds of thousands of dollars savings in war production. He attended the summer meeting of American Society of Civil Engineers, Los Angeles, July 28-30, 1943.

Professor Samuel Brooks Morris served as vice-president, 1942-43, president, 1943-44, American Water Works Association; member, Publications, National Water Policy, and Water and Sewage Development Committees; vice-president, 1942, and president, 1943, San Francisco Section, American Society of Civil Engineers; also, chairman, Committee on Allocation of Costs of Multiple-Purpose Water Projects, American Society of

Civil Engineers; chairman, Board of Public Works, City of Palo Alto; Regional Adviser, Engineering, Science, and Management War Training, Region 20, and Regional Representative, War Manpower Commission, Region XII, ESMWT. He attended the following meetings of technical societies: American Water Works Association, Board of Directors, New York, January 18-19, 1943; Annual War Conference, Cleveland, Ohio, June 15-18, 1943, talk on "Fundamentals of a University Hydraulics Education"; California Section, Oakland, October 29, 1942, talk on "War Emphasis in Water Works Management"; Missouri Valley Section, St. Louis, Missouri, October 23-24, 1942; Pacific Northwest Section, Bellingham, Washington, May 7, 1943, talk on "Priorities, Surplus Stock and Mutual Aid"; Montana Section, Billings, Montana, May 13-14, 1943, talk on "New Contributions in Engineering"; Montana Engineers Association, Helena, Montana, May 12, 1943, talk on "Engineering Developments"; annual meeting of the Society for the Promotion of Engineering Education, Chicago, Illinois, June 19-21, 1943; Engineering College Research Association, June 19, 1943; American Society of Civil Engineers, annual meeting, New York City, January 20-21, 1943; annual convention, Los Angeles, July 28-30, 1943; Stanford Alumni Conference, Los Angeles, May 23, 1943, talk on "Engineering Contributions to a Post-War World"; participated in panel on "Planning for the Future"; Stanford Mothers Club, Sacramento, California, October 12, 1942, talk on "Stanford and the War"; Portland, Oregon, December 18, 1942, talk on "Stanford in Wartime"; Stanford Alumni Association, Washington, D.C., January 15, 1943, talk on "Stanford at Work." He served on the following University committees: member, Public Exercises Committee, Research Committee, Independent Study Committee, Advisory Board, Executive Committee of Stanford Services Committee; chairman, Patent Committee, Engineering Advisory Committee, Stanford Central Valley Committee. He also served as Director, Engineering College Research Association; water consultant, National Resources Planning Board to June 30, 1943; consulting engineer, City of Pasadena Water Department, City of San Diego Water Supply and Distribution, Bonneville Power Authority, and International Boundary Commission. Papers published are listed in the Publications of the Faculty in Appendix V.

Professor Leon B. Reynolds served on the following committees of the San Francisco Section, American Society of Civil Engineers: Sanitary Engineering Division, Committee on Juniors, Committee on Sewer Rental Laws and Procedure, Sanitary Engineering Division. He was chairman of Committee on Revision of Constitution, C.S.W.A.; trustee, Matadero Mosquito Abatement District; assistant editor of *Kiwanigram*, Palo Alto Kiwanis Club; member, District Resolutions Committee, California-Nevada District, Kiwanis Club. He attended the California Section meeting, American Water Works Association, Oakland, California, October 28-30, 1942; Peninsula Water Association meeting, Palo Alto, June 10, 1943, gave a talk on "Utilities in Alaska"; American Society of Civil Engineers convention, Los Angeles, July 1943. On June 17, 1943, he talked before the Palo Alto Kiwanis Club on the "Alcan Highway." He served on the following University committees: chairman, *Alumni Review* Committee in charge of the May

engineering issue; chairman, Library Committee of the School of Engineering; faculty adviser, Stanford Student Chapter, American Society of Civil Engineers; chairman, Employment Committee of the Civil Engineering Department; member, Engineering Advisory Committee. He also gave five lectures at Stanford Medical School in San Francisco, as well as offering a new course, C.E. 166, "Elements of Sanitary Engineering." He is planning another new course in "Water Supply and Sewerage" to be given in the Army Specialized Training Program. He is preparing for publication a paper on "Utilities in Alaska."

Professor Earl C. Thomas was on leave, doing consulting for the United States War Department and various federal agencies.

Mr. Eugene V. Ward served on the subcommittee on Regional Research projects, of the Committee on University Services. In addition to his own lectures, he gave three lectures, autumn quarter, in the course of Professor Reynolds, C.E. 138, on specifications of buildings.

Professor J. B. Wells served as president of the Structural Engineers Association of Northern California, January 1, 1943, to January 1, 1944; member, Air Raid Shelter Committee, San Francisco Civilian War Council; trustee, Matadero Mosquito Abatement District. He attended the meetings of the Structural Engineers Association and the San Francisco Section of American Society of Civil Engineers. His paper, "Resistance of Reinforced Concrete Structures to Air Attack," was published in the October 1942 issue of *Building Standards Monthly*. The same paper with slight modification and with the same title, was published in *Architect and Engineer*, Vol. 152, No. 2, February 1943. During the year he gave several lectures on "Structural Defense" at the War Department Civilian Protection School, Stanford University, and at Plant Protection School in San Jose on November 13, 1942.

Professor Harry A. Williams served as a member of Northern California District Committee of American Society for Testing Materials.

Professor Donovan H. Young is developing a new course in Fluid Mechanics to meet the Army Specialized Training Program. He is preparing for publication, in collaboration with Professor S. Timoshenko, a textbook, *Theory of Structures*, which will be published about January 1, 1944.

Theses.—The students in this department obtaining the degree of Engineer, title of thesis, and the name of the major professor for the past year are as follows: Albert Collins Bardin, "An Experimental Investigation of Wind Pressures on Cylindrical Tanks" (Hedberg); Edward David Thoits, "The Pollution of a Portion of the San Francisco Bay by Domestic and Industrial Wastes" (Reynolds); Marion Carleton Yoder, "Utilization of Sewage Sludge, Gas, and Water in California" (Reynolds).

SAMUEL BROOKS MORRIS
Executive Head
Civil Engineering Department

ELECTRICAL ENGINEERING

Personnel.—The faculty during the academic year were Joseph Snyder Carroll, Hugh Hildreth Skilling, and Frederick Emmons Terman (on leave), professors; Leland Hermon Brown, Ward B. Kindy, and Karl Ralph Spangenberg, associate professors; William George Hoover, assistant professor; Skipwith Wilmer Athey, William John Barclay, Henry Porter Blanchard, Victor Stuart Carson, Lester Marshall Field, Laurel Jones Lewis, and Ralph Judson Smith, acting assistant professors; Willis Allison Cornell, William Benjamin Floyd, Jr., Robert Arthur Helliwell, instructors; Robert Logie Hammett, Robert Lord Kirkwood, Oscar C. Lundstrom, Otway O'Meara Pardee, and Herbert John Shaw, acting instructors. Professors Harry Engwicht, of San Jose State College, and William J. Warren, of the University of Santa Clara, instructed in war-training courses in the summer quarter. Department lecturers were Harold Farley Elliott, Fred Charles Hanker, Josiah Pickard Jollyman, Charles Vincent Litton, and Ezra Frederick Scattergood.

Professor Frederick Emmons Terman was on leave from Stanford University during the year to direct the activities of the Radio Research Laboratory with headquarters in Cambridge, Massachusetts, a highly important part of the nation's war activity co-ordinated with the activities of the National Defense Research Committee.

George Edward Hackley and Charles Franklin Hadley were research assistants during the year and a number of other assistants in instruction and research aided with the work from time to time. Frederick William Schott held the Westinghouse Fellowship during the year. The Electric Heating Research Fellowship was held during part of the year by Winford Morgan Jones.

Because of the specialization of interests on the part of the students it has most regrettably been impossible to find suitable recipients for a number of the fellowships that the University is privileged to award. No award of the Harris J. Ryan High Voltage Research Fellowship was made.

General.—The war activities of the department, begun during the previous year, were continued and expanded during the academic year 1942-43. A number of new activities, including notably the electrical engineering part of the Army Specialized Training Program, were begun during the year.

The advanced engineering curricula of the Army Specialized Training began on May 10, 1943. At that time Electrical Engineering Terms 4A, 4, 5, and 6 were initiated and in August Term 7 was also commenced. It is anticipated that for the duration of the training program the terms from 4 to 7 inclusive will all be given continuously. The technical electrical engineering training comprised in this curriculum is comparable to that in the electrical engineering upper-division program. It is believed that it will be increasingly practicable to combine civilian and Army courses in the coming year.

A continuing series of courses for reservists of the United States Signal Corps, which was begun in April 1942, was continued throughout the academic year. These courses, giving special emphasis on ultra-high

frequency theory and techniques, are given as Pre-Radar training. The course is of twelve-week duration, and new classes were commenced at intervals during the year. During part of the winter and spring six such classes were taught concurrently, and a total of 500 men of the Signal Corps have received this training, which is part of the Engineering, Science, and Management War Training Program.

Also in the Engineering, Science, and Management War Training Program were a number of part-time courses for civilian engineers and workmen in war industry. The part-time courses have been given in San Francisco and at the plants of the companies for which they are presented. These courses have dealt mainly with radio and with electrification on ship-board.

A research program initiated in 1941 and continued since that time under the direction of the National Defense Research Committee, was expanded in scope and transferred to the direction of the Interservice Radio Propagation Laboratory at the beginning of the month of July. Mr. Robert Arthur Helliwell is supervisor of this project. Mr. Helliwell is also in charge of another National Defense Research Committee project that is to be carried on during the year from July 1, 1943, to June 30, 1944.

Research activities sponsored at Stanford University by war industries are likewise being expanded. The most active of these, owing to the greatest financial support, are projects in co-operation with the Sperry Gyroscope Corporation on Klystron research and related problems, and with the International Telephone and Telegraph Company and its subsidiary, Federal Telephone and Radio Laboratories, relating to high-frequency measurements. The projects have proceeded very well and have expanded under the excellent direction of Dr. Karl Spangenberg.

In the electronics research laboratory, considerable expansion in size and improvement of equipment was made possible by a generous gift from Mr. Ralph M. Heintz.

The regular academic program for civilian students continued during the year. The numbers of students in both graduate and undergraduate divisions have continued at average levels, and the civilian students are working with unusual concentration and earnestness. There was little distinction among the four quarters of the academic year in the amount of departmental activities, and most of the students, as well as most of the faculty, were active in the summer quarter as during the rest of the year.

Individual activities.—Mr. Skipwith Wilmer Athey was of great assistance in the development of the Signal Corps Radio Training course, and in its continuation through the year. During the major part of the school year he was responsible for the design and construction of the Stanford Radio Studio and was connected in an advisory capacity with the Radio Workshop and the NBC-Stanford Radio Institute.

Mr. William J. Barclay was again the Stanford representative at a conference on ultra-high-frequency techniques held at the Massachusetts Institute of Technology in September 1942. At this second conference the results of the nation-wide ultra-high-frequency training program were reviewed and changes suggested by representatives of the Armed Forces

incorporated in the plans for subsequent ultra-high-frequency courses given on the campus and in San Francisco. In addition, he has been supervising a research project in the microwave field.

Mr. Henry P. Blanchard directed the Signal Corps Radio Training Program, described above, and also participated in courses of the department.

Dr. Leland H. Brown was in charge of electrical machinery and illumination courses. He was chairman of the Committee on Registration and Graduation of the School of Engineering, and a member of the University Engineering Advisory Committee. He continued to serve as consultant to Safeway Stores, Incorporated, and the Office of Civilian Defense. He also continued lectures on Light Control for the Stanford Civilian Protection School of the War Department. He was chairman of the national Lighting Education Committee of the Illuminating Engineering Society, and the Research Committee of the Sight Conservation Society of Northern California. He was a member of the Lighting Practice Committee and Light in Wartime Committee of the Illuminating Engineering Society, and one of its official representatives on the Inter-Society Color Council.

Dr. Joseph Snyder Carroll continued research work in co-operation with the Bureau of Power and Light of the City of Los Angeles, in connection with the problem of corona loss from high-voltage transmission lines across the desert. He continued throughout the year teaching an ESMWT class on marine electrical theory and apparatus given primarily for shipyard electrical workers in the Bay Region and taught classes in the spring and summer in connection with the Army Specialized Training Program. He continued as consultant for Permanente Metals Corporation.

Mr. Victor Stuart Carson assisted with the administration and teaching of the electrical engineering curriculum of the Army Specialized Training Program. He also supervised ESMWT courses in fundamentals of radio at San Francisco and Eureka, California, throughout the year. Approximately two hundred civilians were given basic radio training in these courses. A course in marine communication was also given at Marinship, Sausalito, California, under Mr. Carson's supervision. In view of modern developments, a two-quarter course in network theory was organized by Mr. Carson and given to graduate students during the spring and summer quarters.

Mr. Lester M. Field presented courses in the Signal Corps Radio Training Program, assisting particularly in the ultra-high-frequency work. In association with Dr. Spangenberg, he prepared material for publication giving the results of measurements made at Stanford on the properties of electrostatic electron lenses. He organized and participated in lectures in an ESMWT course on vacuum tubes given at the Heintz & Kaufman radio tube plant in South San Francisco.

Mr. Robert A. Helliwell continued supervision of a research project that was sponsored until June 30 by the National Defense Research Committee and that has continued since July 1 under the direction of the Interservice Radio Laboratory of the National Bureau of Standards. He has begun work on another project sponsored by the National Defense Research Committee.

Dr. William George Hoover taught courses in electric circuits and special war courses. These included an ESMWT course on marine electrical theory and apparatus during the autumn and winter, and a Signal Corps Radio Training Course during the spring quarter. He concluded work on the development of a cathode-ray oscillograph for circuit-breaker recovery-voltage measurement, and has completed a paper on this subject for publication. In July he aided the Radiation Laboratory at the University of California in measurement of surge voltages occurring on equipment being used in war research.

Dr. Hugh Hildreth Skilling, as acting head of the department, coordinated the various activities. On occasion he was acting dean of the School of Engineering. He was assistant director of Basic and Advanced Engineering units of the Army Specialized Training Program, Official Investigator of the National Defense Research Committee projects, and in educational charge of the Engineering, Science, and Management War Training courses for Signal Corps Radio Training. He was a member of the national Committee on Student Branches and the Committee on Education of the American Institute of Electrical Engineers, and of the Student Activities Committee of the San Francisco section of the Institute. He completed for publication a book on *Fundamentals of Electric Waves*, and made revisions in the text for second, third, and fourth printings.

Mr. Ralph J. Smith taught a number of Signal Corps Radio Training courses, and was in charge of several courses in electric circuits for the Department of Electrical Engineering and a course in thermodynamics for the Department of Mechanical Engineering. He continued research on magnetostriction.

Dr. Karl Spangenberg directed the research activities of the department. Among these are research in ultra-high-frequencies sponsored by the Sperry Gyroscope Corporation, and research in electronics sponsored by the Federal Telephone and Radio Laboratories. He gave an evening course in electron tube circuits in San Francisco under the auspices of ESMWT. In January he took office as chairman of the San Francisco section of the Institute of Radio Engineers, and was also a member of the Membership and Papers Committee of the Institute of Radio Engineers. During the summer of 1943 he participated in research conferences at the laboratories of Sperry Gyroscope Corporation and the Federal Telephone and Radio Laboratories, going to the East Coast at the invitation of these groups. He visited the manufacturing plants of Sylvania Electric Products, Incorporated, and Jack and Heintz, Incorporated, en route. He prepared Section 4 on "Vacuum Tubes and Electronics" and contributed to Sections 2 and 3, "Circuit Elements" and "Circuit Theory," of the *Radio Engineers' Handbook* published by Dr. F. E. Terman.

Dr. Frederick Emmons Terman, absent on leave to be director of the Radio Research Laboratory at Cambridge, Massachusetts, completed publication of a *Radio Engineers' Handbook*.

HUGH HILDRETH SKILLING
Professor of Electrical Engineering

MECHANICAL ENGINEERING

Teaching staff.—The teaching staff for the year 1942-43 consisted of Lydik Siegmundfeldt Jacobsen, executive head, Alfred Salem Niles, Elliott Gray Reid, Stephen P. Timoshenko, professors; Ferenc Molnar, acting associate professor; Milton Lawrence Wiedmann, associate professor; Henry Phillip Goode, Alexander Louis London, assistant professors; Donald L. Mason (spring quarter), Asa A. Robley, Albert Abbe Rowe, Wilmer Wheelon Young (autumn quarter), teaching specialists; Ralph Alois Seban, instructor.

Emeritus professors.—Dr. William Frederick Durand is in Washington, D.C., where he is serving as a member of the National Advisory Committee for Aeronautics and as a chairman of a special committee of that body, and also as chairman of the Engineering Division of the National Research Council.

Professor Everett P. Lesley is technical editor at the Ames Aeronautical Laboratory, Moffett Field.

Professor Guido H. Marx has been employed by San Jose State College as consultant on a technical education project. He recently completed the constitutional term as chairman of the Public Utilities Section of the Commonwealth Club with a historical survey and bibliography of the Central Valleys Project. In the line of public service, Professor Marx is campaign director in Palo Alto for the U.S.O.

Staff activities.—Professors Arthur B. Domonoske, Boynton M. Green, Merrill S. Hugo, and Volney C. Finch are officers in the Armed Services. In June, Professor Jacobsen accepted a commission in the United States Naval Reserve to do vibration work, and in July Professor London, Lt. (j.g.), United States Naval Reserve, went on active duty at Washington, D.C., with the Bureau of Ships.

Professor Jacobsen supervised drafting courses under the Engineering, Science, and Management War Training Program, and acted as consultant for the United States Army Engineers on the Salinas Dam.

Professor Niles was in charge of a full-time Engineering, Science, and Management War Training course in airplane-stress analysis and drafting for twenty-five men sent here by the Hughes Aircraft Company during the winter quarter, and gave the work in stress analysis methods. One report on experimental work for the National Advisory Committee for Aeronautics has been published as a "restricted" Technical Note; a second has been accepted for such publication, and two others have been submitted to the Committee. Professor Niles spent the summer working for the Consolidated-Vultee Aircraft Corporation in San Diego and Fort Worth, Texas.

Professor Reid devoted all of his time not required for instruction to the planning and supervision of research for the National Advisory Committee for Aeronautics. One somewhat extensive propeller investigation has been completed and reported. Another is now in progress, and a proposal for further studies, based on recommendations contained in the first report, has been submitted in response to a request from the National Advisory Committee for Aeronautics.

Professor Timoshenko attended the annual meeting of the American Society of Mechanical Engineers in New York, December 1, and the meeting of the A.S.M.E. branch at East Pittsburgh, December 7, where he presented a paper on "Stress Analysis of Suspension Bridges." He gave a series of ten lectures in San Francisco under the auspices of the Engineering, Science, and Management War Training Program entitled "Selected Topics in Mechanics of Materials." At the meeting of the American Mathematical Society held at Stanford April 21, Professor Timoshenko delivered a paper on "Theory of Suspension Bridges." He attended the semi-annual meeting of the American Society of Mechanical Engineers held in Los Angeles, June 14-17, to present a paper on "Problems of Elastic Instability in Aircraft Structures" to the Applied Mechanics Section. A series of twelve lectures on theory of structures was given at Brown University by Professor Timoshenko, June 24 to July 7. He attended the meeting of the Society for the Promotion of Engineering Education, held in Chicago June 18 to 20.

Associate Professor Wiedmann devoted his time not required for instruction to reorganization of the mechanical engineering laboratory and courses and to problems in interior ballistics. He supervised three courses in marine steam-power equipment, given under the auspices of the Engineering, Science, and Management War Training Program.

Assistant Professor Goode taught a number of management classes under the Engineering, Science, and Management War Training Program, and acted as Assistant Director of the Program. He also aided in the establishment and supervision of war training courses in the Bay Area.

Assistant Professor London represented Stanford at the spring meeting of the American Society of Mechanical Engineers, held at Davenport, Iowa, April 26 to 28, and presented a paper entitled "Rate of Ice Formation," as joint author with R. A. Seban. June 14-17, he attended the semi-annual meeting of the American Society of Mechanical Engineers in Los Angeles where he presented a paper on "Test and Predicted Behaviors of Engine Oil Coolers," as joint author with J. I. Brewster. He also substituted for Mr. R. A. Seban at this meeting, delivering a paper entitled "A Thermal Anemometer for Low-Velocity Flow," by Messrs. R. A. Seban, W. H. Hillendahl, E. J. Gallagher, and A. L. London. Professor London engaged in research work on the prediction and tests of quick-freezing rates for foods, and during the year he conducted commercial tests for two corporations.

Mr. Ralph Seban served as Honorary Chairman of the Stanford Student Branch, American Society of Mechanical Engineers, and assisted Professor London in commercial tests. He was co-author of the paper, "Rate of Ice Formation" and one of the collaborators of the paper, "A Thermal Anemometer for Low-Velocity Flow."

At the end of the autumn quarter, the department lost to industry the services of Mr. W. W. Young who had taught foundry practice at Stanford since 1932.

The department offered eight courses during the summer quarter. The following instructors were on duty for civilian courses and for the Army Student Training Program: Associate Professor Wiedmann, Acting Asso-

ciate Professor Molnar, Assistant Professor Goode, and Messrs. Seban, Rowe, and Robley.

Loan and fellowship funds.—Messrs. T. B. Carvey and G. W. Koffer were the recipients of grants from the Safeway Stores Fellowship.

Publications.—The publications of the staff have been submitted as a separate item to appear under "Publications of the Faculty."

Engineer's degree.—The following thesis was submitted in partial fulfillment of the requirements for the degree of Engineer: "An Experimental Investigation of the Lift of Airfoils in Pitching Oscillation," Ralph Francis Huntsberger, Jr.

Master of Arts degree.—The degree of Master of Arts in Mechanical Engineering was granted to Berry Wilmot Foster and to Kuang Hao Hsiao.

Prizes.—The William Roberts Eckart Prize of \$50 was awarded to William Frank Ballhaus for submitting the best thesis to the department. His thesis title was "General Stability of Aircraft Structures."

Repeating success for two successive years, three senior members of the Stanford Student Branch of the American Society of Mechanical Engineers won annual competitions for student papers in the Pacific Southwest Section. In 1942, Mr. Wesley Hillendahl received first prize for his paper, "The Design and Calibration of a Thermal Anemometer"; in 1943 Mr. Thomas Carvey won first prize for his paper, "Analytical Basis for Quick-Freezing Operations," and Mr. Cedric Ferguson was awarded second prize for the presentation of his paper, "Design Calculations for Finned-Cylinder Cooling."

ALFRED S. NILES

*Professor of Aeronautic Engineering and
Acting Executive Head of the Department*

MILITARY SCIENCE AND TACTICS

Personnel.—Lieutenant Colonel John B. Madden, Field Artillery, reported for duty as assistant professor of military science and tactics on September 16, 1942, from the 195th Field Artillery Regiment, Fort Ord, California, in accordance with Paragraph 9, Special Orders 245, War Department, September 10, 1942. Colonel Madden was transferred on June 12, 1943, to Army Specialized Training Unit 3931, Stanford University School of Medicine, San Francisco, California, pursuant to Paragraph 66, Special Orders 160, Headquarters Ninth Service Command, June 10, 1943.

Lieutenant Colonel Edward J. Soares, Ordnance Department, was promoted to lieutenant colonel in accordance with Paragraph 15, Special Orders 34, War Department, Washington, D.C., February 3, 1943.

Major Forest J. Curtis, Field Artillery, reported for duty as assistant professor of military science and tactics, September 18, 1942, from the 195th Field Artillery Regiment, Fort Ord, California, pursuant to Paragraph 9, Special Orders 245, War Department, September 10, 1942.

Major Robert J. Tripp, Field Artillery, was promoted to major pur-

suant to Paragraph 15, Special Orders 165, War Department, Washington, D.C., June 14, 1943.

Captain Jillson M. Peattie, Field Artillery, and Captain Robert A. Ramzoni, Field Artillery, were transferred to Field Artillery Replacement Training Center, Camp Roberts, California, pursuant to Paragraph 9, Special Orders 245, War Department, Washington, D.C., September 10, 1942.

First Lieutenant John R. Craf, Quartermaster Corps, reported from the Quartermaster School, Camp Lee, Virginia, for duty as assistant professor of military science and tactics with the Quartermaster ROTC Unit on September 25, 1942, in accordance with Paragraph 9, Special Orders 245, War Department, September 10, 1942. Lieutenant Craf was promoted to the grade of first lieutenant in accordance with Paragraph 15, Special Orders 341, War Department, December 15, 1942.

General.—The past year has seen many changes and great expansion in the activities of the Military Department. Stanford University was selected as one of the schools to participate in the Army Specialized Training Program. The University has the largest Army Specialized Training Unit in the Ninth Service Command. In addition to being selected for an Army Specialized Training Unit, Stanford University was selected as the location of one of the Specialized Training Assignment and Reclassification Units, commonly known as a STAR Unit.

STARU 3903 was activated April 8, 1943, in accordance with General Order 56, Headquarters Ninth Service Command, April 27, 1943. ASTU 3905 was activated April 23, 1943, in accordance with General Order 55, HNSC, April 24, 1943.

The Stanford University School of Medicine in San Francisco, California, was selected as another Army Specialized Training Unit. This unit, ASTU 3931, was activated June 8, 1943, pursuant to General Order 72, HNSC, June 9, 1943.

Colonel Harry B. Allen, in addition to his duties as professor of military science and tactics at Stanford University, was appointed commandant of STARU 3903, pursuant to General Order 56, HNSC, April 27, 1943, commandant of ASTU 3905, pursuant to General Order 55, HNSC, April 24, 1943, and commandant of ASTU 3931, pursuant to Special Orders No. 225, HNSC, August 14, 1943.

The Civilian Protection School located at Stanford University was another unit under the command of Colonel Allen. This organization, SCU 3915, was established during February 1942 for the purpose of training civilian officials and personnel of the Army and Navy as instructors in subjects pertinent to the Civilian Defense Program. This school was inactivated pursuant to General Order 91, HNSC, July 31, 1943.

The Civil Affairs Training School was established by the War Department at Stanford University and began its activities in the training of officers on August 1, 1943. Colonel Allen has co-ordinated this War Department activity with the University.

The military activities on the Stanford University campus have resulted in new duties and assignments for the staff of the Department of Military Science and Tactics. The activation of new units has been accomplished

without interference with the functioning of the Stanford University Reserve Officers' Training Corps Unit. Colonel Harry B. Allen is commanding officer of all military units functioning at Stanford University. Lieutenant Colonel Edward J. Soares is executive officer and adjutant, Major Robert J. Tripp is assistant executive officer and training officer, and First Lieutenant John L. Craf is supply officer.

Stanford University, in addition to providing the academic instruction and physical program, has contracted with the government to provide for the housing, feeding, and medical care for Army students assigned to the various units on the campus. All men's dormitories on the campus, as well as several of the fraternity houses, are now occupied by the soldier students.

A Quartermaster Unit of the Reserve Officers' Training Corps was established at the beginning of the autumn quarter, 1942-43. Fifty graduate students of the Graduate School of Business, candidates for the degree of Master of Business Administration, were enrolled in the Quartermaster ROTC Unit.

At the end of the winter quarter, 1942-43, members of the first-year advanced course of all units, Field Artillery, Ordnance, and Quartermaster, were called to active duty, and ordered to replacement training centers of their respective arm or service. Here they completed a course of basic military training pertinent to their arm or service. These students who are now returning to Stanford will be under the direction of the Army Specialized Training Division and will follow a curriculum which will be of particular value to them in their arm or service.

Second-year advanced-course ROTC students were called to active duty during the spring quarter and ordered to Stanford University. The present policy of the War Department will permit those who have not graduated to continue their academic work until graduation or until December 31, 1943, whichever is earlier. Those who had already graduated, or who did not elect to continue their academic work, were ordered to the Officer Candidate School of their respective branch during the summer quarter.

During the past year, the Department of Military Science and Tactics participated in the program of enlisting qualified university students in the Enlisted Reserve Corps. Approximately six hundred Stanford University students became reservists in the Army of the United States. Lieutenant Colonel Edward J. Soares supervised this activity as Recruiting Officer.

Awards were made to students of the department as follows:

The Field Artillery Association Medal

Mr. William H. McPherson

Ordnance Scholarship Keys

Mr. Stephen J. Kline

Mr. Gilbert C. Thompson

Scabbard and Blade Medals

Mr. Morton V. Orme

Mr. Walter B. Lull

Walter Awards

Mr. Denslow B. Green, Mr. Alan P. Bridgford, Mr. Darrell L. Ritter

Stanford University ROTC Medals

Mr. Charles E. Crary

Mr. James H. Smith

Mr. Robert J. Saleeby

Mr. James R. Frolik

Two graduates of the Stanford ROTC were awarded commissions in the United States Marine Corps Réserve with an opportunity to qualify for permanent commissions in the Marine Corps. Normally no more than one graduate is selected from any one university. This year, however, because of the excellent records of the students concerned and because of the high standard of training which has been maintained in the Military Department, both the principal and alternate were tendered commissions. Those so honored were Lieutenant Hugh Randolph Alvord, USMCR (Field Artillery ROTC Unit); Lieutenant Darrell Lloyd Ritter, USMCR (Ordnance Department ROTC Unit).

Graduates of the Stanford ROTC occupy many positions of responsibility in the Armed Services and have been cited for high honors on numerous occasions. These Stanford men are bringing glory to their country and their University in the present conflict.

For the duration of the present war, the Advanced Course has been suspended in all ROTC units. Although there will be no new advanced-course students, the basic course of the ROTC will continue to be given at Stanford University, with certain courses formerly given only to students in the advanced course available to all students. The completion of this basic training by the college student is of great value in his preparation for future service.

The spirit of the instructors and the students has been the highest, with an enthusiasm and esprit de corps unmatched. The War Department standard has been maintained in all instruction, in the Field Artillery, Ordnance, and Quartermaster units. The Stanford ROTC again received the top rating of "Excellent" following the annual inspection by the representative of the Commanding General, Ninth Service Command.

Major General Kenyon A. Joyce, Commanding General, Ninth Service Command, participated in the University Commencement exercises.

A ceremonial parade of all military personnel stationed on the Stanford University campus was held in honor of Chancellor Ray Lyman Wilbur and the new president, Dr. Donald B. Tresidder, on August 28, 1943.

The successful operation of the many military activities taking place at Stanford University has been possible only as a result of the splendid co-operation given to the Military Department by the administration and faculty of the University.

HARRY B. ALLEN

Colonel, Field Artillery

Professor of Military Science and Tactics

MINING ENGINEERING

Personnel.—Professors: Frederick George Tickell (executive head), Welton Joseph Crook (on leave). Associate Professors: Charles Arthur Dobbel (on leave), Orson Cutler Shepard. Assistant Professor: Hadley Robertson Bramel (acting). Instructor: John Robert Clark. Lecturers: Worthen Bradley, Norman Cleaveland, Ira Beaman Joralemon, Charles White Merrill. Department Secretary: Mabel E. Clark until June 1, her place then being filled by Mrs. Marie Olson Eddy. Mechanician: Ulysses A. Schall. Technical Assistants: Norman B. Clark, Wallace J. Erichsen, Gordon W. Jewett, Albert H. Johnson, Carl J. Rosene.

Master's degrees.—Siddik Aksoy, Cihat Mehmet Barut, Edwin Custer James, Kenan Mehmet Okan, Kasim Ekrem Onder, Francisco Alfredo Pellas, and Nevzat Tiner.

Engineer's degrees and thesis subjects.—Siddik Aksoy, "The Recovery of Tungsten from a Tungsten-bearing Antimony Slag"; Cihat Mehmet Barut, "A Study of Differential Sulphating for Domestic Chromite Ores"; Kenan Mehmet Okan, "A Study of Amenability of Ores for Heavy Medium Separation"; Francisco Alfredo Pellas, "The Metallurgical Treatment of the San Juan Mines Ore."

Fellowships.—The Shell Fellowship in Petroleum Engineering was held by Edwin Custer James.

Activities.—In the continued absence of Professor Crook (Colonel, Ordnance Department, U.S.A.) courses in physical metallurgy were handled in part by Professor Shepard and in part by Dr. John R. Clark, who designed and supervised the construction of an X-ray diffraction instrument for research in the physics of metals and in the analysis of inorganic substances.

Instruction in metal mining was carried on by Professor Bramel, who was also engaged in a field and statistical study of the copper resources of California co-operatively with the California Department of Natural Resources. Professor Bramel also directed a radio broadcast on the subject of the search for strategic minerals in the Western states. He published a paper entitled "Structure Chart of Solving Geological and Mining Problems."

Professor Shepard, in addition to the teaching of civilian students in both physical and process metallurgy, taught several extension courses (ESMWT) at Moffett Field and at shipyards in the Bay region. He also taught a course in metallography and heat treatment to a class of the Army Specialized Training Program. Professor Shepard engaged in researches for the Kaiser Company, the United States Coast Guard, and other governmental agencies.

Professor Tickell, in collaboration with Professor Bailey Willis, engaged in research on a problem for the Panama Canal Commission. He was a member of the Admission Committee and of the faculty Administrative Committee for the handling of the STAR, ASTP, and military unit's program. He was also a member of the Committee of the Education Division of the American Institute of Mining Engineers.

FREDERICK GEORGE TICKELL
Professor of Petroleum Engineering
Executive Head of the Department

Walter Awards

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HARRY B. ALLEN

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various groups of students in the Army instructional programs; and, before taking leave in April 1943, gave three courses in Los Angeles and one in San Francisco on "Statistical Methods of Quality Control" for the Engineering, Science, and Management War Training of the United States Office of Education.

Important and time-consuming direct group contributions to the war effort were made in two series of confidential memoranda prepared for two war centers under contractual arrangements. Drs. Bennett, Davis, Brandt, Farnsworth, Timoshenko, and other members of the staff as well, participated in these.

Recognition of the need for leeway to conduct such activities, and in focus research efforts more directly upon wartime and postwar conditions, resulted in the number of issues in the nineteenth volume of *Wheat Studies* dropping from eight to six; a series of *War-Peace Pamphlets* was inaugurated; and fewer than the usual number of courses of instruction were offered. Largely as an appropriate vehicle for studies proceeding under grant from the Rockefeller Foundation, a series of books entitled *Commodity Studies* was initiated.

Publications during the year included the six numbers in the nineteenth volume of *Wheat Studies*, two books, two *War-Peace Pamphlets*, several articles in professional journals, and one chapter contributed to a book published elsewhere. Dr. Davis and Dr. Timoshenko each contributed one of the two special studies in *Wheat Studies*, and Dr. Davis conducted a survey of the world wheat developments covering the period September 1942.

Dr. Bennett wrote the annual review of the wheat situation, with the assistance of Dr. Farnsworth and Miss Clough. Dr. Farnsworth, with the assistance of Dr. Farnsworth and Dr. Timoshenko was engaged for the survey covering the period ending in January 1943. Dr. Timoshenko wrote the survey covering the period ending in May 1943, with the assistance of Dr. Timoshenko and Miss Clough.

The first two books in the new *Commodity Policy Studies* were Dr. Farnsworth's *International Agreements on Conservation of Marine Resources with Special Reference to the North Pacific* (March 1943), and Mr. Wicki's *World Coffee Economy with Special Reference to Control Schemes* (1943). The first two issues of the new *War-Peace Pamphlets* were Farnsworth's *Wartime Food Developments in Germany* (September 1943) and Dr. Brandt's *Fats and Oils in the War* (June 1943). Not in this line of similar character was Dr. Davis' *Wartime Food Management*, a pamphlet in pamphlet form by the Los Angeles Chamber of Commerce.

Other publications are listed in "Publications of the Faculty." In spite of difficult conditions, sales of publications rose slightly from \$3,243 in 1941-42 to \$3,443 in 1942-43.

The Rockefeller Foundation's three-year grant of funds to the Institute for 1942-43 was the third, directed by Dr. Davis in the field of inter-commodity agreements and by Dr. Timoshenko in the field of relations between agriculture and industry, was extended to August 31, 1944, "to permit completion and publication of the International Commodity Agreements." In addition to the two books previously listed as the first in the new

Commodity Policy Studies, two other publications made possible by this grant have appeared this year: "New International Wheat Agreements" (Davis) and "Variability in Wheat Yields and Outputs. Part II. Regional Aspects of Variability" (Timoshenko). Both were published as issues of *Wheat Studies*. Substantial progress has been made on other investigations in this group of research projects. Dr. Tomasevich left the sugar study well started. Studies of rubber and tin (Knorr) and tea (Wickizer) are well advanced. Dr. Davis is at work on a pamphlet and a book dealing in general terms with international commodity arrangements. Mr. Egoroff, under Dr. Timoshenko's direction, expects to complete his study on the role of agriculture in the dynamics of the Argentine economy, which was interrupted by his work for the government.

In June 1943 the Rockefeller Foundation made a new grant to the Institute in general support of a flexible wartime research program. This grant, \$15,000 annually for three years, will extend until August 31, 1946. Since it facilitates holding together a competent co-operative research group, it will permit the Institute to mature more research of fundamental significance than would otherwise be possible, to render greater service to governmental agencies, to increase contributions to analysis of postwar problems, and to continue the training of research personnel.

In addition to the studies listed above as research projects nearing completion under Rockefeller grants, the research program for 1943-44 will involve continuing close analysis of wartime food developments throughout the world, special attention being given to postwar food problems. Other topics under investigation are: agricultural reconstruction in Europe; nutritional problems and policies at home and abroad; historical changes in the Hawaiian food supply; consumption economics; the world potato economy; colonies in the postwar world; consumer expenditures in the United States; and sugar in national diets. Arrangements have been made with Dr. Naum Jasny of the Office of Economic Warfare and Dr. J. M. Tinley of the University of California to write studies respectively of "The Price of Wheat in Classical Rome" and "South African Commodity Controls." Unforeseen demands from governmental agencies may modify the program appreciably.

Only two courses of instruction were offered during the year, by Drs. Bennett and Brandt; and Dr. Bennett directed the research work of one student. The enrolment of students totaled 23. Dr. Working, however, taught two courses in the Economics Department, and Drs. Bennett, Brandt, and Davis contributed special lectures or discussions in courses offered by other departments.

The principal addresses delivered by staff members were as follows:

Dr. Bennett: "The Place of Food in Postwar Reconstruction" (Institute of World Affairs, Riverside); "Food for Europe: Seven Questions" (Stanford University Alumni Conference, San Francisco and Los Angeles); "What Are Essential Food Requirements in Wartime?" (Western Farm Economics Association, University of California, Berkeley).

Dr. Brandt: "Food and the War" (Adult Education Forum, San Jose); "Food Outlook in 1943" and "Food to the End of the War and After" (Com-

nonwealth Club, San Francisco); "Is Germany Cracking Economically?" (San Francisco Electric Club, San Francisco); "The Food Outlook for 1943" (Institute of Food Technologists, Berkeley); "World Food Situation" (Tuolumne County Forum, Tuolumne); "Will America Go Hungry?" (Town Hall, Fresno and San Francisco); "The German Home Front" (Foreign Policy Association, Minneapolis); "Food as One of the Strategic Issues in This War" (Los Angeles Committee on Foreign Relations, Los Angeles); "Will Food Win the War?" (Santa Barbara Women's Club, Santa Barbara); "Economics in the Postwar World" and "The Problem of Raw Materials" (Oklahoma Institute of International Relations, Norman); "Rationing as an Essential to Food Conservation and Equitable Distribution, including Consideration of Various Methods" (Western Farm Economics Association, and San Francisco chapters of American Statistical Association and Agricultural Marketing Association, San Francisco); "The Strategy of Relief and Reconstruction" (Institute of International Relations, Mills College, Oakland).

Dr. Davis: "Nutrition, Economics, and Policy" (Bryn Mawr College, Bryn Mawr); "Wartime Problems of Agriculture" (Vassar College, Poughkeepsie); "The World's Food Problem Now" (Charter Week Conference on Wartime Food Problems, University of California, Berkeley); "Wartime Food Management" (Los Angeles Chamber of Commerce, Los Angeles); "Food Subsidies" (San Francisco Center of California League of Women Voters, San Francisco).

Dr. Farnsworth: "Our Nutrition Program in the War Economy" (California State Council of Defense, San Francisco).

Mr. Wickizer: "The Inter-American Coffee Agreement" (Research Club, Stanford University).

Dr. Working: "The Role of Prices in Adjusting Agricultural Production to War Needs" (California Farm Bureau Federation, Fresno); "Statistical Quality Control" (Sigma Xi, Stanford University, and Manufacturing and Industries Committee of the Los Angeles Chamber of Commerce, Los Angeles).

Within the University, Dr. Bennett served on the Subcommittee on Home Economics. Dr. Davis took the initiative in organizing a Stanford group co-operating with the Universities Committee on Postwar Problems, and continued to serve as chairman of the Library Committee and on the Graduate Study Committee (as alternate for B. F. Haley, on leave). Dr. Working continued as chairman of the Committee on Instruction in Statistics. Elsewhere, Dr. Bennett was appointed to membership on the Pacific Coast Regional Committee of the Social Science Research Council and the Bay Area Nutrition in Industry Committee. Dr. Brandt was elected president of the Western Farm Economics Association for 1943-44. Dr. Davis was made a member of the Committee on Fellows of the American Statistical Association (a five-year appointment), and continued as a member of the Board of Trustees of the American Council of the Institute of Pacific Relations.

MERRILL KELLEY BENNETT
Executive Director

SCHOOL OF HEALTH

Administrative staff.—Oswald N. Andersen, professor and general director of the School; Alfred R. Masters, general manager, Board of Athletic Control; William B. Owens, faculty representative, Pacific Coast Intercollegiate Athletic Conference.

Leaves of absence.—Dr. Charles E. Shepard, September 1, 1942; Dr. Arthur A. Esslinger, January 23, 1943; Dr. Craig L. Taylor, July 1, 1943.

Resignations.—Ned B. Johns, March 19, 1943; Woodrow R. Weir, March 30, 1943; Harry H. Shipkey, May 23, 1943; Dr. B. Paul Davies, August 31, 1943.

Divisional reports.—The personnel of the School is recorded with the reports of the several divisions. Complete reports for the year 1942-43 from divisional directors are on file in the office of the General Director. Selected parts of these reports are submitted here.

DIVISION OF HYGIENE

Faculty.—Oliver E. Byrd, associate professor and director; Dr. O. N. Andersen, Dr. George S. Luckett, Dr. Helen B. Pryor, professors; Dr. B. Paul Davies, Ned B. Johns, Edith M. Lindsay, Craig L. Taylor, Dr. Lois P. Todd, assistant professors; Dr. James A. Cutting, lecturer.

Retirement of Dr. Walter H. Brown.—One of the important events was the retirement at the end of 1941-42 of Dr. Walter H. Brown, who had served since 1929 as director of the health instruction activities of the School of Health. It can be said without question that Dr. Brown has been primarily responsible for the building of the Stanford program in health education.

A new title for the division.—By action of the Board of Trustees the division will be known as the Division of Health Education of the School of Health. It is thought that the new title will be in keeping with the functions of the division as well as in accord with present terminology.

Student enrolment.—Enrolment in hygiene courses declined on both the undergraduate and graduate levels, but the decrease was most marked for the graduates. Enrolment in the regular hygiene courses for undergraduates went down from 872 for the previous year to 561 for the year 1942-43. While the latter figure is only 64 per cent of the previous year's enrolment, it is significant that much of the difference was taken up by special courses designed to meet wartime needs. When enrolment in the latter courses is added to that of the regular hygiene courses, the total enrolment reaches 805 as compared to the previous year's total of 872.

Enrolment in the professional courses in hygiene went down to almost exactly 50 per cent of the previous year's figure. In 1941-42, 306 students were enrolled in our professional courses, but in 1942-43 only 158 students entered into the graduate program, as measured by class enrolments.

Revision of curriculum.—Several changes were made in the curriculum of the Division of Hygiene during the year. An attempt to telescope courses

40 and 51 into a single five-unit course did not meet with the approval of the students and the plan was abandoned. It appeared that the students preferred two three-unit courses to a single five-unit course such as the Foundations of Health course that was offered on an experimental basis. Other changes were made, such as the dropping of course 261, Problems of Hygiene, for course 262, Problems of Health Service. This change was made in order to eliminate some duplication of content. The Educational Hygiene 293 course was also dropped from the curriculum of the School of Education on the recommendation of the School of Health.

New courses that met with student approval were those pertaining more directly to the war. Course 60, Military Hygiene, was well received, as was course 58, Civilian Defense.

Army instruction.—Instruction in military hygiene was begun for the Army during the summer quarter, when two classes were held on Saturday afternoons for sections of the Psychology unit. These courses were well received by the soldiers but were discontinued at the end of the summer because of an overcrowding of the military curriculum and heavy demands on the time of the individual soldiers.

DIVISION OF PHYSICAL EDUCATION FOR MEN

Staff.—Arthur A. Esslinger, associate professor and director of the division (to January 23); Everett S. Dean, acting director (from January 23); John W. Bunn, professor; Franklin P. Johnson, Harry W. Maloney, Harry M. Wolter, directors of sports; Ernst Brandsten, advisory director; Edward M. Twiggs, Marchmont Schwartz, acting directors; E. P. Hunt, associate professor; Harry H. Shipkey, Myron Sprague, associate directors; Elwyn Bugge, assistant director; Victor J. Lindskog, Edward W. Mumby, Woodrow R. Weir, Francis E. Wilcox (fall and summer quarters), assistants.

Physical education for men.—The physical training program was already adapted to the Army's requirements when the first contingent of Army students were sent to the University. This transition from civilian to Army program in physical education required only minor adjustments. Much of the ground work for the training program in the Army was developed here at Stanford as a result of the work of Dr. Esslinger, who is now on leave.

At the end of the year approximately 80 per cent of the time of the staff was devoted to the training of soldier students and only 20 per cent to the civilian men student body.

The Board of Athletic Control authorized the expenditure of funds for the building of an obstacle course adjacent to Angell Field. After a survey of some of the best courses already built in California, it was possible to set up an obstacle course the various parts of which had already been tested at other locations. The Army students are required to train on the obstacle course as part of the regular program.

Aquatic sports have been stressed. All soldier students were given swimming tests, and those who could not swim one hundred yards were required to take swimming as part of their training. Physical fitness tests were given

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Leaves of absence.—Dr. Charles E. Shepard, September 1, 1942; Dr. Arthur A. Esslinger, January 23, 1943; Dr. Craig L. Taylor, July 1, 1943.

Resignations.—Ned B. Johns, March 19, 1943; Woodrow R. Weir, March 30, 1943; Harry H. Shipkey, May 23, 1943; Dr. B. Paul Davies, August 31, 1943.

Divisional reports.—The personnel of the School is recorded with the reports of the several divisions. Complete reports for the year 1942-43 from divisional directors are on file in the office of the General Director. Selected parts of these reports are submitted here.

DIVISION OF HYGIENE

Faculty.—Oliver E. Byrd, associate professor and director; Dr. O. N. Andersen, Dr. George S. Luckett, Dr. Helen B. Pryor, professors; Dr. B. Paul Davies, Ned B. Johns, Edith M. Lindsay, Craig L. Taylor, Dr. Lois P. Todd, assistant professors; Dr. James A. Cutting, lecturer.

Retirement of Dr. Walter H. Brown.—One of the important events was the retirement at the end of 1941-42 of Dr. Walter H. Brown, who had served since 1929 as director of the health instruction activities of the School of Health. It can be said without question that Dr. Brown has been primarily responsible for the building of the Stanford program in health education.

A new title for the division.—By action of the Board of Trustees the division will be known as the Division of Health Education of the School of Health. It is thought that the new title will be in keeping with the functions of the division as well as in accord with present terminology.

Student enrolment.—Enrolment in hygiene courses declined on both the undergraduate and graduate levels, but the decrease was most marked for the graduates. Enrolment in the regular hygiene courses for undergraduates went down from 872 for the previous year to 561 for the year 1942-43. While the latter figure is only 64 per cent of the previous year's enrolment, it is significant that much of the difference was taken up by special courses designed to meet wartime needs. When enrolment in the latter courses is added to that of the regular hygiene courses, the total enrolment reaches 805 as compared to the previous year's total of 872.

Enrolment in the professional courses in hygiene went down to almost exactly 50 per cent of the previous year's figure. In 1941-42, 306 students were enrolled in our professional courses, but in 1942-43 only 158 students entered into the graduate program, as measured by class enrolments.

Revision of curriculum.—Several changes were made in the curriculum of the Division of Hygiene during the year. An attempt to telescope courses

under the supervision of Dr. Esslinger was followed by retesting in which the relative gains of control and experimental companies were assessed in terms of the physical-fitness test. It was found that, while the control companies gained 3.5 per cent on the average, the experimental companies gained 23.5 per cent.

The net gain in favor of the new program was striking proof of its superiority, and as a result, it was the recommended Army physical-training program. It is now widely used throughout the Armed Services. Dr. Esslinger is now actively engaged in promoting the improvement of Army physical training along the lines indicated by this experiment. The members of the faculty of the division co-operated actively in giving the tests necessary to this experiment.

The Northern California Sector of the Western Defense Command was the first Army unit to adopt the new program, and in January Major General Wilson requested that one hundred and fifty officers be sent here for a one-day institute to start the program in the Army camps situated in this area.

In April the National Broadcasting Company on their "Unlimited Horizons" program presented the story of the work of Dr. Esslinger and the faculty of the School in developing a physical-fitness test and a physical-training program here at Stanford.

MEN'S HEALTH SERVICE

Staff.—Dr. O. N. Andersen, director and medical adviser of men; Drs. B. Paul Davies and Charles O. Morse, full-time physicians; Drs. Jefferson M. Crismon, Burt L. Davis, Edwin E. Hobby, Sidney Raffel, Dean Storey, and E. J. Strick, part-time physicians.

Nurses.—Mrs. Dorothea R. Bertoglio, nurse technician; Miss Tonnetta Jonning, Mrs. Gerda Blackman (summer quarter), nurses.

Consultants.—Drs. H. E. Alderson (Dermatology), Charles Barnett (Medicine), Ward Cooper (Otorhinolaryngology), J. A. Cutting (Neuropsychiatry), George S. Johnson (Neuropsychiatry), Donald E. King (Orthopedic Surgery), Philip H. Pierson (Medicine), Robert A. Powers (Roentgenology), Ernest E. Sloman (Dentistry), H. Gordon Smith (Ophthalmology), Blake C. Wilbur (Surgery).

MEN'S HEALTH SERVICE

PURPOSE AND NUMBER OF STUDENT CALLS, 1942-43

Purpose of Visit	Number of Calls
Medical treatment	8,552
Consultations (medical advice, etc.)	3,022
Health examinations and inspections	2,117
Laboratory services	2,494
Physical therapy (not including treatments given in Physical Therapy Department)	2,316
Military (all purposes)	1,371
Cases referred	886
Total calls	20,758

both soldiers and civilian students each quarter. Groups tested in the spring and summer quarters showed gains from 5 to 10 per cent in muscular power and co-ordination according to the standard Army tests.

Enrollment in physical education activity classes during the year totaled 4,822, and enrollment in professional courses in physical education totaled 192. The reduction in the number of students here was not unexpected inasmuch as the Army drained off a large percentage of the majors and graduate students in this field.

Intramural and intercollegiate athletic programs.—Stanford's intramural program continued to hold the students' interest during these trying times. Football, basketball, volleyball, and softball were the most popular. These sports are all fine conditioners and will continue to be stressed on all of our programs. The Army intramural program got under way during the summer quarter with softball and volleyball teams competing. Plans were laid for the expansion of the Army intramural program.

The war began to show its effects upon the Stanford intercollegiate athletic program in the spring quarter. Many athletes were called into the service from the baseball and track teams. All teams made a very creditable showing despite this condition. Football started rather slowly but gained momentum and ended the season with a six-game winning streak that made Stanford one of the outstanding teams on the Pacific Coast. It was the first year as head coach at Stanford for Marchmont Schwartz, and his record was excellent. The basketball team had an average season with its main accomplishment a tie for second place in the Conference.

Minor sports were noticeably affected by the war when the tennis and golf teams were not represented in the national meets as had been the custom. Each team enjoyed a successful year. The rugby and fencing teams were undefeated. Boxing and the all-University tournament proved very popular. The swimming team had a very successful season with Emmet Cashin, its star, setting three world's records.

Physical-fitness testing.—During the autumn quarter of 1942, faculty members of the Division of Physical Education participated in a unique experiment which has had a salutary effect in improving the quality of physical training in the Armed Forces. Dr. A. A. Esslinger, who has been a strong advocate of a more vigorous training for the combat soldier, together with Colonel Theodore Bank and Dr. C. H. McCloy of the University of Iowa, made a survey of the physical fitness of troops in training at various camps during the summer of 1942. Dr. Esslinger was a collaborator in devising a field test for making these assessments, and as a result of this survey recommendations were made to the War Department embodying the routine use of these tests and a program of physical training activities. At the beginning of the autumn quarter these tests and certain parts of the training program were introduced into the Stanford physical education program.

At the request of Colonel Hallenbeck, commander of the 125th Infantry regiment stationed at Page Mill Camp, these tests were given to all personnel in the camp. Two companies were retained as controls and continued on the current Army training program, and two companies were put on the new Bank-Esslinger-McCloy program. An experimental period of five weeks

Regulation of foodhandling.—Due to the labor situation, the turnover of foodhandlers became so rapid it was not possible to get all of them to report for health examination and vaccination. A total of 177 foodhandlers were examined.

Two hundred and ninety-four inspection trips have been made at intervals to check the sanitation of the kitchens and foodhandling methods. The standards have not been fully met during the year because of the rapid turnover of help. The uncertainty of continued operation of the fraternity house kitchens with the consequent hesitation to make expenditures for improvements contributed to this condition.

Milk and water supply.—Seventy-two milk samples were analyzed at the hospital laboratory. Several samples did not meet the required standards and the necessary action was taken to correct this situation. For the domestic water supply, 149 samples were examined and found to be satisfactory. Samples of swimming-pool water were taken monthly and all had low bacterial counts.

Environmental control.—All campus rest rooms were inspected every two or three months and found to be generally satisfactory. All rooms in private dwellings rented to students which were inspected by the Public Health Nurse were found to meet the set standards.

A complete sanitary survey of all fraternity houses and the Co-operative Club was made and reports written as requested by the Dean of Men's office.

Public health service to the Army was rendered according to the Army's requirements and consisted of periodic inspections of barracks, mess, and post exchanges. Staff physicians conducted monthly physical inspections of enlisted personnel.

FACULTY ACTIVITIES

The School was co-sponsor (with the Bay Section of the California Association for Health, Physical Education, and Recreation) of the Bay Section Institute on Health and Physical Education in the War, which was attended by approximately four hundred specialists in health instruction, physical education, and recreation.

Dr. Andersen served as president of the Santa Clara County Tuberculosis Association. He was appointed a member of the Committee on Student Health of the American Medical Association and attended a meeting of that committee in the offices of the Selective Service in Washington in February. He presented a paper, "Tuberculosis in Wartime," at the annual meeting of the Fresno County Tuberculosis Association. On University committees he served as chairman of the Public Health Committee and the Faculty Athletic Committee, and as a member of the Scholarship and Registration committees.

Dr. Byrd presented papers at teachers' institutes at Willows and Ukiah and at the Conference for Health Education Co-ordinators sponsored by the California State Department of Health in San Jose. He also spoke before several local groups. He served as vice-president for health of the California

Association for Health, Physical Education, and Recreation; and vice-president of the Bay Section of the association.

Mr. Dean served on the board of directors in the National Basketball Coaches Association.

Mr. Johnson continued as secretary-treasurer of the National Track Coaches Association.

Miss Lindsay served as secretary-treasurer of the Pacific Coast Section of the American Student Health Association and was elected president of the Santa Clara County Unit of the California Association for Health, Physical Education, and Recreation.

Professor Owens, a member of the Faculty Athletic Committee and the Board of Athletic Control, acted as faculty athletic representative of the University in all matters affecting the eligibility of students for athletic competition with other institutions or organizations. He represented the University in the Pacific Coast Intercollegiate Athletic Conference. He attended meetings of the Conference at San Francisco, December 1942 and June 1943. Professor Owens held the following offices: member of the National Collegiate Athletic Association Executive Committee and member of the American Olympic Association Executive Committee. He attended the Executive Committee meeting of the N.C.A.A. in September 1942 at Chicago.

Mr. Wolter served as a member of the Pan-American Baseball Committee of the United States of America Sports Federation, the Office of Defense Health and Welfare Services under the direction of Mr. John B. Kelly, and the Palo Alto Adult Recreation Committee. He was a director of the American Baseball Congress, Inc., and a representative of the National Collegiate Athletic Association to the United States Pan-American Games Baseball Committee. He served as captain of the United States Army Air Forces Ground Observer Corps.

O. N. ANDERSEN
General Director

SCHOOL OF HEALTH (WOMEN)

WOMEN'S HEALTH SERVICE

Staff.—Helen Brenton Pryor, professor, director, and medical adviser of women; Lois P. Todd, assistant professor and examining physician; Rachel S. Rafferty, Ruth Tangier Smith, part-time assistant medical examiners of women; Mary Ferguson Wood, nurse; Florence B. Jourdin, assistant nurse; Mildred Vishoot, secretary; Florence D. Smith, assistant secretary.

When physical fitness is emphasized as a patriotic duty, the school health service has both opportunity and obligation to help students attain a high level of physical health.

More students than ever before used the facilities of the Women's Health Service during the past year as shown by 16,680 calls made and 10,434 cases treated. The general health level was higher than last year when judged by the numbers admitted to hospital and rest home. This year 222 women were hospitalized for 908 days as compared with 317 women last year for

1,192 days. Stricter social regulations of the war period have probably resulted in more hours of sleep for the average student, which in turn is reflected in better health.

As usual, upper respiratory infections brought in the most calls with 1,988 new and 1,376 old cases treated. Skin infections accounted for 2,419 calls and gastro-intestinal upsets brought in 275 more. Laboratory tests were made as follows:

Wassermann	93
Tuberculin	121
Blood counts	982
Urinalyses	834
Fluoroscopic	34
X-rays	56
Basal metabolism	156

Physical examinations were done for 692 new students; 57 for voluntary senior check-ups; 104 for food handlers; 50 for nursery school and Communication Center students. In addition all girls who played competitive team sports were checked for fitness and health examinations were done for all women candidates for advanced graduate degrees and all candidates for teaching credentials. Women students preparing for Medical School or School of Nursing were given special physical examinations which included tuberculin skin tests, X-rays, as indicated, Schick tests, and typhoid vaccine.

The Health Service has continued a co-operative relationship with family physicians of many students in carrying out medical treatments started at home.

All women students reported at mid-quarter as doing unsatisfactory school work were called in to discuss possible contributory health factors. In co-operation with the Dean of Women conferences have been held with a number of students who needed counsel regarding problems of emotional and social adjustment to college life.

Dr. Pryor served as a member of the following University committees: Public Health, Student Hospital Fund, Faculty Health Examinations, Pre-nursing, Stanford Civilian Defense Council as co-chairman of Medical Unit, War Council, and as chairman of Nutrition and Dietetics. In the School of Health she served on the Committee on Degrees and Credentials and the Curriculum Committee. She was a member of the Joint Committee of the School of Health and the School of Education. She taught a class in the School of Education (Growth and Maturation of the Human Organism) and two in the School of Health (Developmental Health Examinations and Physical Diagnosis) in addition to supervising 105 students in Individual Assignment.

Dr. Todd conducted First Aid classes during autumn and winter quarters and Dr. Rafferty taught them during winter quarter. Mrs. Wood taught the Volunteer Nurse's Aide course every quarter during the year.

Extracurricular activities.—Dr. Todd's extracurricular activities included participation in a panel discussion at the conference on Physical Fitness in February of the Bay Area Section of the California Association for Health, Physical Education, and Recreation, and talks on China to Stanford Mothers' Club and other groups.

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made to register each student in the activity most suited to her individual needs and which would contribute most to her personal fitness. As fitness has always been one objective of the activity program, no radical change was necessary in the program. In the classes and through an all-University women's meeting students were aided in realizing the necessity of personal fitness and ways of accomplishing it.

Recreation.—The department helped in every way possible to meet the problem of providing wholesome recreation on campus for all students. The Women's Athletic Association sponsored several Ranch Rumpus parties at which folk and square dancing was enjoyed by a large number of men and women students. The same Association sponsored the annual Field Day in the spring for Stanford women and a Sports Day in the autumn for Mills College and Stanford women. Sports Days with other colleges were discontinued due to war transportation difficulties. A series of four square dance evenings was sponsored by Mrs. Lidster during summer quarter. The swimming pool, gymnasium, badminton, tennis, and volleyball courts, and the archery range were made available for recreation purposes. The swimming pool was closed except to women students in summer quarter due to presence of infantile paralysis in the community. The gymnasium was used practically every Saturday evening for student dances; a total of 26 dances were held here.

Extracurricular activities.—Various members of the staff made a real contribution to physical education in the state of California through their work on the book *Physical Education: A Wartime and Peacetime Program for Girls* which was the report of the Women's Advisory Committee appointed by Dr. Walter Dexter, California State Superintendent of Schools, for the purpose of revising the state program in physical education. Stanford was well represented on the State Committee. Mrs. Knapp was chairman of the Women's Advisory Committee of Northern California, chairman of the Editing Committee, and agent for the sale of the book, in addition to being a contributor to the manuscript. Miss Worthingham was a member of the Editing Committee and chairman and contributor to the section on Body Mechanics. Miss Lindsay also contributed to this section. Mrs. Barr was chairman of the section on Games; Miss Weed and Mrs. Roth also contributed. Mrs. Lidster contributed to the section on Rhythm. Miss Weed made the diagrams and Miss Haskell, accompanist for dance classes, assisted with music diagrams. Other members of the staff assisted in assembling and distributing the manuscript. The department secretaries aided in the typing and secretarial work involved. Evidence that the efforts of the Committee were worth while has been shown by favorable comments received from physical education teachers not only in California but from all parts of the United States, and from the wide sale of the photolithed copies made at Stanford University Press.

Mrs. Margaret C. Barr taught her usual program of activities and methods classes during autumn, winter, and spring quarters. She served as a member of the Curriculum and Degrees and Credentials committees in the School of Health. She assisted the student head of archery in conducting a mail tournament in archery for the colleges in the Bay area. This was to

Dr. Pryor was a member of the Board of Directors of the Santa Clara County Tuberculosis Association and served as vice-president of United China Relief. She was a member of the Advisory Board of the Stanford Y.W.C.A. She continued as research associate in the Institute of Child Welfare of the University of California. She gave the following talks: "Maternal and Child Health in Wartime" in the Adult Education Series at Sequoia Union High School on November 5; "Women's Role in the World We Are Fighting For" before the Free World Forum on November 14; "Child Growth and Development" before the Walter Hays Parent-Teacher Association in December; "The Nursery School Program" to the Women's Vocational Committee on January 25; "Tropical Diseases" to Public Health Nurses on April 28; "Child Welfare Needs and Problems in the Postwar World" at the Institute on Educational Problems in Wartime on August 12. She addressed the Pediatric Conference in Oakland on March 24-26 and the San Mateo County Nurses' Association on July 26. During the year Dr. Pryor spoke to several student groups on the campus, and to Education Workshop groups.

PHYSICAL EDUCATION

Staff.—Maud Lombard Knapp, director and associate professor; Margaret C. Barr, Marie Manchee Fenner, Edith Lindsay (half-time), Luell A. Weed, Catherine Worthingham (half-time), assistant professors; Sylvia Cain, Miriam Bleamaster Lidster, Helen McArthur Roth, instructors; Mildred Vi-shoot, secretary; Florence D. Smith, assistant secretary; Mildred Redeker, locker-room attendant; Dorothea Paulman (spring and summer quarters), Ann Ufer (summer quarter), graduate assistants; Richard D. Davis, golf caddy.

Professional courses.—There is a great demand for women trained in physical education in the teaching profession as well as in Y.W.C.A., Red Cross, and U.S.O. war recreation work, and in the WACS and WAVES. Every effort is being made in this department to interest more women in the profession and to keep as many as possible of those already in the profession interested in teaching. A total of 34 women took the professional program in physical education during the year.

To encourage young women to enter the profession of physical education, the Women's Athletic Association gave two \$500 scholarships for the academic year 1943-44, one for a lower-division woman and one for an upper-division woman.

Helen Hart and Marion MacQuivey completed work for the Master's degree and nine students received A.B. degrees with majors in Physical Education during the year.

Activity courses.—Many additional activity classes were offered to take care of the increased number of students taking physical education owing to the change in the requirement from two to four years. A total of 3,552 students were enrolled in activity classes during the year. Every effort was

he purpose of suggesting changes needed in the State Program of Physical Education. She was a member of the Publicity Committee of the California Association for Health, Physical Education, and Recreation. She contributed to the book, *Education in Wartime and After*, written by the faculty of the School of Education. She attended the Physical Fitness Institute of the Ninth Corps Area in Berkeley in December and served on the State Committee arranging institutes in various parts of the state. She was chairman of the program for Women's Section of the Physical Fitness Institute of the Bay Section of the California Association for Health, Physical Education, and Recreation held at Stanford in February.

Mrs. Lidster, in addition to her teaching of dance classes, was faculty adviser for Orchesis, honorary dance society. During autumn quarter Orchesis was hostess to the Peninsular Area High School Dance Symposium and during winter quarter attended the College Symposium in Modern Dance at San Francisco State College where Mrs. Lidster led the discussion and demonstration on "Modern Dance Techniques Used as a Means of Physical and Emotional Relaxation." Orchesis also presented the annual dance program at Memorial Hall in spring quarter, participated in the "Pan-American Program" square-dance group, and sponsored a series of four teaching sessions in folk and square dance open to all students and enlisted men on campus during summer quarter. Mrs. Lidster gave a lecture-demonstration, assisted by Orchesis, for the Faculty Women's Club. She was also adviser for the folk-dance and square-dance group. This group was an outcome of the Pan-American program and, although it was not organized as a club, the members demonstrated and helped in the teaching of square dances at the Mountain View Enlisted Men's Club, demonstrated and aided in the teaching of square and folk dances at the Ranch Rumpus, held square- and folk-dance meetings twice a month during spring quarter, and assisted in teaching folk and square dances for a series of four dances during summer quarter. Mrs. Lidster led the demonstration of social dance and folk dance at the Physical Fitness Institute held at Stanford in February.

Miss Lindsay completed her work for the Ph.D. degree. She was secretary-treasurer of the Pacific Coast Section of the American Student Health Association, and president-elect of the Santa Clara County Unit of the California Association for Health, Physical Education, and Recreation. She attended the Northern California Public Health Association Conference in May and the Bay Section Physical Fitness Institute in February.

Mrs. Roth, in addition to her teaching schedule, was Northern California chairman for Recreational Games of the National Section on Women's Athletics. She was elected secretary of the Santa Clara County Unit of the California Association for Health, Physical Education, and Recreation. She was a member of the Palo Alto Chapter of the American Red Cross Lifesaving and Water Safety Committee. In April she attended the American Red Cross meeting of the San Mateo Chapter honoring Commodore Longellow, at which she was awarded the medal and certificate for eight years of volunteer service in First Aid and Lifesaving by the San Mateo County Chapter. She attended the Aquatic Forum sponsored by Army, Navy, Pan-American Airways, and Y.M.C.A. at Treasure Island in June. During spring

include the elementary as well as the more advanced archers. Members of her archery classes entered two other tournaments, one conducted by the National Archery Association and one by the Western Section of that Association. Stanford's first team was in seventh place in the National competition in which 82 teams were entered. Her other three teams placed 17, 31, and 39 respectively. Stanford placed its first team in first place in the B competition in the Western Section tournament. Mrs. Barr was chairman of Archery for Northern California under the National Section on Women's Athletics and was a member of the National Committee on Archery (Western Section). She renewed her National B umpire's rating in hockey, her National Official's rating in basketball, and served as National Judge under Women's National Officials Rating Committee. She continued her service as a member of the examining committees in basketball and hockey of the San Francisco Bay Counties Board of Women's Officials. She was elected to the Legislative Committee of the National Section on Women's Athletics as Member-at-large. She was a member of the Leadership Training Committee of the Pacific Camping Association, and of the Studies Committee of the National Camping Association. She arranged the demonstration on games for the Physical Fitness Institute of the Bay Section of the California Association for Health, Physical Education, and Recreation held at Stanford in February. She was in charge of the First Aid group serving the Casualty Station at the Women's Health Service, renewed her Instructor's card in First Aid, and taught one class of townspeople the Standard course.

Mrs. Cain reported that interest in golf continued unabated so far as intermediate and advanced students were concerned. However, beginners, because of the scarcity of balls and their increased cost, did not register in as large numbers as formerly. This resulted in a superior group of golfers and was exceedingly gratifying to the instructor. This year there were more advanced students than ever before, which resulted in increased interest in golf intramurals.

Mrs. Fenner was a member of the Curriculum and Degrees and Credentials committees of the School of Health. She was chairman of the Northern California Aquatic Committee, member of the American Red Cross Aquatic Committee of the Palo Alto Chapter. She attended the Pacific Camping Conference and the Conference on Military Swimming sponsored by the Army and Navy on Treasure Island. She was swimming director at Camp Wasibo, San Francisco Camp Fire Girls Camp, during the summers of 1942 and 1943.

Mrs. Knapp, in addition to her teaching and administrative duties, served as chairman of the Curriculum Committee and as member of the Degrees and Credentials Committee of the School of Health, of the Joint Committee of the School of Education and the School of Health, and of the Credentials Committee of the School of Education. She was faculty adviser to the Women's Athletic Association. She was President of the Western Society of Departments of Physical Education for College Women and Executive Board member of the National Association of Directors of Physical Education. She attended the meeting of the Northern California Advisory Committee which was called by Dr. Dexter, State Superintendent of Schools, for

Williams, instructor; Dorothy Young and Helen Johnston (summer quarter), acting instructors; Evelyn Anderson, Herbert Browne, special lecturers; Beulah Rader, supervisor.

The Division of Physical Therapy through the additional financial support of the National Foundation for Infantile Paralysis was able to increase its staff and therefore its offerings to students.

Professional program.—A total of 70 students were enrolled as physical therapy majors. Forty-one were graduate students, 14 graduate nurses or graduate physical therapists without A.B. degrees, and 15 undergraduate students. Twenty-one of the graduate students were registered on the unit basis for one or more quarters. Five graduate students were recipients of scholarships from the National Foundation for Infantile Paralysis.

The Division of Physical Therapy was designated by the National Foundation for Infantile Paralysis as one of the seven approved centers for training personnel in the Kenny Method of treating poliomyelitis. A total of 40 physical therapy technicians were trained in three five-week intensive courses and 71 nurses in eleven six-day hot pack-technique courses. These technicians and nurses represented two-thirds of the trained personnel in the Western states actively engaged in treating the large number of poliomyelitis cases in the summer of 1943. Two three-day courses in the Kenny Method for members of the medical profession were attended by 23 doctors.

Stanford University Hospitals, Children's Hospital in San Francisco, San Francisco Hospital, and Santa Clara County Hospital co-operated in the training of the Kenny Method personnel. In addition to the physical therapy staff, Victor Hall, M.D., gave lectures on the "Pathophysiology of Poliomyelitis," and H. E. Thelander, M.D., and Lucille Eising, M.D., contributed lectures on the "Clinical Picture" and "Physical Therapy in Poliomyelitis." Because of the sharp increase of poliomyelitis cases, Helen Johnston of the Minneapolis Curative Workshop was loaned to us by that institution to assist in the supervision of students of the Kenny Method during the summer quarter.

The Physical Therapy Department maintained in the training quarters of the Men's Gymnasium by the Division of Physical Therapy co-operated with the men's and women's Health Services in the physical therapy treatment of civilian students and soldiers in the STAR and ASTP units. The number of treatments given was as follows: autumn, 728; winter, 499; spring, 481; summer, 477; making a total of 2,185 treatments for the year.

Faculty activities.—Evelyn Anderson served as secretary of the American Physiotherapy Association for the third consecutive year. She was chairman of the Vocational Service of the Northern California District of the American Physiotherapy Association.

Herbert Browne discussed "The Relationship of Orthopedic Surgery to Physical Therapy" at Stanford University Hospitals. He was medical adviser of the Palo Alto Chapter of the American Red Cross and chief of the Civilian Defense Emergency Medical Service.

Lucille Daniels addressed the Western Orthopedic Society on the subject, "The Kenny Method of Treating Infantile Paralysis." She also spoke before the Northern California District of the California Chapter of the American

quarter she presented a volunteer preliminary training course for water safety instructors under the Palo Alto Chapter of the American Red Cross. After taking a refresher course in Lifesaving and Water Safety under the American Red Cross, she was reappointed as Volunteer Instructor. At the Bay Section meeting of the California Association for Health, Physical Education, and Recreation she gave a demonstration of the technique of teaching speedball. She sponsored a folk-dance program for Alden Club of the San Mateo Congregational Church in March, and a folk-dance festival under the auspices of the Sierra Club held at the Women's Gymnasium in May.

Miss Weed was a member of the Curriculum and Degrees and Credentials committees of the School of Health. She was chairman of the National Tennis Umpires' Rating Committee for the National Board of Women's Officials, a member of Winter Sports and Outing Committee of the National Section on Women's Athletics and a member of the Editorial Board for the *Winter Sports and Outing Activities Guide*, adviser pro tem during autumn quarter for the Women's Athletic Association Sports Day with Mills College, adviser of Stanford Women's Tennis Club which sponsored All-University Singles Tournaments during fall, spring, and summer quarters, and Mixed Doubles Tournament during spring quarter. She was a member of the San Francisco Bay Counties Board of Women's Officials Tennis Rating Committee, and a member of the Recreation Advisory Board for Palo Alto Community Center. She gave a demonstration on "Teaching Tennis to Junior High School Groups" at the Bay area Physical Fitness Conference held at Stanford in February. Her war activities were as follows: volunteer chairman of the Palo Alto Chapter of the American Red Cross Committee on Lifesaving and Water Safety; chairman of Communication Box Messengers and of the Registration and Information Desk Committee for Stanford Civilian Defense. She renewed her Water Safety Instructor's Certificate, assisted with the preliminary training course for water safety instructors during spring quarter, conducted two senior lifesaving courses for the Stanford War Board, and assisted with the Swim Campaign at Palo Alto Community Center. She attended the meeting of the California Ski Association Advisory Board at Fairmont Hotel in San Francisco in October, where the special subject of discussion was "Ski Patrols for Colleges"; the San Francisco Institute on Physical Education at the Whitcomb Hotel in San Francisco in November; the San Francisco Bay Counties Board of Women's Officials meeting in San Francisco in December; and the American Red Cross War Fund Drive Conference in San Jose in January. She arranged the Stanford Tuesday Evening Series program on December 1, and introduced the speaker, the president of the California Ski Association.

PHYSICAL THERAPY

Staff.—Catherine Worthingham, assistant professor and director; William Northway, assistant professor and medical director; Lucille Daniels, assistant professor; Helen Hardenbergh, acting assistant professor; Marian

tudents. The major course leads to hospital dietitian or institutional management degrees.

Miss Tilden, in addition to her teaching program, supervised the planning and equipment of the foods laboratory which is equipped to serve 16 students. War priorities and scarcity of materials made it a difficult problem. However, the laboratory was ready for use April 1.

Miss Tilden continued to work with the Washington Nutrition Steering Committee and the Food Preservation Committee of Seattle. The latter committee has published two bulletins on *Food Preservation*. She has been a member of the Palo Alto Nutrition Group and has spoken to various student groups on the campus. She is co-author of "Vitalized Teaching," published in *Forecast*. Aside from her work in the field of nutrition and dietetics, she helped to organize and managed the Stanford Co-operative Nursery School. Twenty children aged 2 to 4 years were enrolled and there is a long waiting list. She has met with the mothers of the Nursery School children once a month and has attended several local Bay area meetings connected with the recent government interest in the preschool child problems. The Nursery School is a training laboratory in which students of education and psychology observe and learn nursery school procedures.

HELEN BENTON PRYOR
*Medical Adviser of Women
and Executive Head
School of Health (Women)*

SCHOOL OF HUMANITIES

The School of Humanities, the establishment of which was authorized by action of the Board of Trustees on July 22, 1941, completed in 1942-43 the first year of its actual operation. The departments and divisions forming the School are: Classics, English, Germanic Languages, Graphic Art, History, Music, Philosophy, Religion, Romanic Languages, Slavic Languages, Speech and Drama.* The formation of the School as an active collaboration among these departments and divisions and the creation of a School program such as was to a large extent made possible by a three-year grant from the Rockefeller Foundation totaling \$47,500. Under this extension of budget several new teachers were appointed to the School: Lewis Mumford, as professor of humanities; Arthur E. Bestor, Jr., Desmond S. Powell, and Jeffery Smith, as assistant professors of humanities. Professor Shau Wing Chan was transferred from the Department of English to the School of Humanities as assistant professor of Chinese and humanities, and Mr. Douglas Atcheson was appointed as instructor in Japanese in the School of Humanities.

In the last quarter of the year Professors Felix M. Keesing and C. Langdon White were brought to Stanford as professor of anthropology and

* The departments of History and Philosophy also maintain their status in the School of Social Sciences.

professor of geography, respectively, and were attached to the School of Humanities.

The Executive Committee serving when the program opened in September consisted of Frederick Anderson (Romanic Languages), at large; John Wendell Dodds (English), dean; Raymond Davis Harriman (Classics), language and literature; Hubert Crouse Heffner (Speech and Drama), fine arts; Henry Lanz (Slavic Languages), philosophy; Edith Ronald Mirrieles (English), at large; Lewis Mumford (Humanities); George Frank Sensabaugh (English), language and literature; Lynn Townsend White, Jr. (History), history.

New committees, with the following chairmen, were appointed throughout the year to co-ordinate and extend the activities of the School:

Annual Conference	F. W. Strothmann
Distributed Minor	R. D. Harriman
Library Committee	C. A. Barker
Lower Division	L. T. White, Jr.

Regional Committees

Far East	S. W. Chan
Latin America	A. M. Espinosa
Greece	H. D. Hansen
Russia	H. Lanz
France	G. Lemaitre
Central Europe	B. Q. Morgan
Schedule	V. A. Anderson
Symposium	L. T. Chapin, H. H. Hudson

A survey of the slides available in the departments of the School was made by a committee under the joint chairmanship of Professors Hazel Hansen and Daniel Mendelowitz. This report was mimeographed and circulated to members of the School.

There was also created an informal committee to be known as the Dean's Committee, composed of friends of Stanford who are interested in the activities of the School and in interpreting those activities to the larger circle of the Stanford family. This committee proved most helpful at many stages in the first critical year of the School's existence and will be a continuing source of strength in the liaison between the School of Humanities and the wider circle of the friends of Stanford. The following people served as members of this committee:

Paul Davis	Mrs. Stanhope Nixon
Mrs. Roger Goodan	Dr. Harry Reynolds
Morgan A. Gunst	Mrs. Edwin R. Sheldon
Mrs. Mary Kohler	

It was inevitable that the work of the School during its first year of existence should have been severely affected by the increasing pressures of war and the necessity of adapting university curricula and programs to the needs of the various Army Training programs which have come to Stanford; nevertheless, it is the feeling of all those interested in the activities of the School that the establishment of the School at such a time of crisis was from every point of view wise, and a tribute to the far-seeing imagination of those, whether foundations or individuals, who have been helpful in supporting it.

More than ever in time of war we need to hang on to the basic concepts of the civilization for which we are fighting, and to be aware, too, that the disciplines which form the humanities can be an important aid in making real those ideals which must be the basis of a successful war.

In spite of the limitations which war curricula put on the School, groundwork for the basic program of humanities was laid during this year, and much progress was made in the direction of articulating the School program and in building toward the future.

Courses.—Much effort during the year went into the organization and teaching of a basic Humanities course covering three quarters, the general title of which was "The Nature of Man." This was open to all upper-division university students, but was required of those majoring in the School program. Mr. Lewis Mumford gave the lectures throughout this course, and the section work was carried on by Professors Bestor, Powell, and Smith. In addition to these courses the Humanities staff offered a range of other work, much of which was pointed toward American civilization, a field which is being developed as one of the first of a number of concentrations for majors at the School. The fine co-operation in the School program of the departments composing the School should be mentioned here—in committee work, in the loan of staff, in the teaching of courses, and in the general eager desire to make the new School an important part of the University program. Not the least of such contributions was the donation of \$700 given by the Department of Germanic Languages to the first Humanities Conference, held May 7 and 8. The success of the kind of closely knit program which represents the goal of the School of Humanities depends heavily upon such thoroughgoing interest and co-operation, and the extent of that interest is one of the healthiest symptoms which any academic venture could have.

The course in world literature, taught co-operatively, and originally instituted in the School of Letters, was continued this year with the following people taking part: Professor Philip W. Harsh (Classics), Professor F. W. Strothmann (Germanic Languages), Professor Frederick Anderson (Romanic Languages), and Professor William Irvine (English).

During the winter quarter the School offered a new intensive course in Japanese language, taught by Mr. Douglas Atcheson and the following conversation assistants: Mr. Kuang Hao Hsiao, Mrs. Tuksoon Kim, Mrs. Margarita Kopf Manwaring, and Professor William L. Schwartz (Romanic Languages). The twenty-two men and women in this course studied nothing but Japanese for the entire quarter, attending class for thirty-four hours a week and receiving a total of twenty credits. The experiment proved to be greatly successful, and all of the men in the course eligible for military service were absorbed quickly into the Army and Navy advanced Japanese language schools. Two of the three women in the course went into the Navy Japanese language school. During the spring quarter Mr. Hsiao offered a five-unit course in Japanese, and during the summer this work was handled by Mr. André Chang and Mr. Samuel Shin.

During the year a great deal of work was done by committees from various departments in planning a series of regional programs for the School of Humanities, in which each student entering such a program would study

intensively one foreign language and the aspects of the area concerned—political, economic, geographic, ethnologic, literary, philosophical, sociological, historical, etc. The regions to be developed were: Far East, Latin America, Greece, Russia, France, Central Europe. Before these plans could be brought to maturity, however, teaching in the Foreign Area and Language programs of the Army so impinged upon the teaching time of the staff that it was necessary to hold the plans in abeyance. It was interesting, however, that Stanford should have felt the need for area training and should have itself projected such training before its importance was recognized in the Army Training Program. The plans already laid by the School of Humanities proved of great value in developing certain aspects of the curriculum for the Army.

With the establishment of the European and Far Eastern Area and Language Units in the AST program at Stanford, as well as in the Civil Affairs School for Europe, the need for the humanities became immediately apparent. The drain upon our language staffs was immediate and heavy. In the Far Eastern Unit, Japanese, Chinese, and Malay are being taught, and in the European Units, German, Italian, French, and Spanish. In the Far Eastern Unit, with which the dean has been associated as director, it is felt that Stanford is developing in its Army program a pattern for Pacific studies which might well receive increased emphasis at Stanford after the war. The inclusion of cultural anthropology and human geography have strengthened the scope of the humanities, and the pattern, which includes the integrated study of the peoples, customs, languages, and places of the Pacific and the Far East, may well help to determine one of the future directions of the humanities at Stanford. In addition to this, the method of planning and teaching these Area programs has required such a scrapping of conventional courses, and an interlocked planning and implementation of the curriculum on the part of teachers from a wide variety of fields, that much is being learned about new ways of teaching. The enthusiasm of those connected with the Army Area and Language programs is testimony to the vitality which is inherent in such a new approach.

Both in relation to the School of Humanities and the Far Eastern Area and Language program the Director of the University Libraries has been of great service in helping secure and organize necessary materials.

An excellent chance for the faculty of the School of Humanities to talk over mutual problems came with the institution of a regular Wednesday Humanities Luncheon, held in the basement of the Women's Clubhouse, with each person bringing his own lunch. This has offered a most pleasant informal way of exchanging ideas.

During the year the School of Humanities sponsored a series of four symposiums, offered under the general title of "Constructive Forces in a Chaotic World," and drawing in as speakers a wide range of Stanford professors. The subjects of these symposiums and the speakers were as follows:

"The Crisis in Culture"—Speakers: Professor Charles A. Barker, History; Professor Hoyt H. Hudson, Literature; Professor Karl Brandt, Economics; Professor Frederick O. Koenig, Science; and Professor Lewis Mumford, Humanities.

language in International Understanding"—Speakers: Professors Ralph H. Lutz, Ronald Hilton, Shau Wing Chan, Raymond D. Harriman.

Education and International Understanding"—Speakers: Professors Lawrence G. Thomas, Irwin Abrams, F. W. Strothmann.

Forces for Economic Reconstruction"—Speakers: Professors Karl Brandt, David E. Faville, William S. Hopkins.

The climax of the year came with the presentation of the first Stanford Conference on the Humanities, held on May 7 and 8, with one hundred twenty-five delegates in attendance from California and surrounding states. The theme of the Conference was "The Humanities in the War and the Postwar World," and the speeches and discussions aroused a great deal of enthusiasm on the part of those who attended this first conference of the kind to be held on the Pacific coast. The main speakers and their subjects were as follows:

Paul Green, "The Responsibilities of Humanistic Education Today" (read).

G. A. Borgese, "Humanism, an Old Challenge in a New World."

Frederick O. Koenig, "Science and the Humanities."

Frederic Spiegelberg, "The Japanese Mind and the Western World."

Lynn T. White, Jr., "Conflicting Forces in the United States."

Waldo G. Leland, "Present Problems in the Light of Experience."

David H. Stevens, "The Rockefeller Foundation and the Humanities."

Ray Lyman Wilbur, "The Widening Geographical Horizon."

Shou-Yi Ch'en, "The Far East."

Lewis Mumford, "Ideological Reorientation."

In addition to these there were a number of panel discussions.

Transportation and housing made the physical plans for the Conference difficult, and a great deal of the credit for the arrangements must be given to Professor F. W. Strothmann and his committee for their energetic and successful efforts to make the guests comfortable during their stay.

The *Proceedings of the Conference*, including all the main speeches, are being printed by the Stanford University Press, and the volume is at present in the printer's hands.

The activities of the faculty have been as follows:

Mr. Dodds was elected vice-president of the Western College Association and was appointed a member of the Board of Trustees of Mills College. During the year he made the following talks: Los Angeles Alumni Conference, May 23, 1943; San Francisco Alumni Conference, February 1; Commencement Address, Pomona College, April 26; Commencement Address, College of Physicians and Surgeons, April 15; Sacramento Teachers Institute, November 7, 1942; Book Day, Mills College, December 2; League of Women Voters in Palo Alto, April 21; Annual Dinner Address, Stanford Philological Association, May 27. During the summer quarter he served as Director of the Army Specialized Training Program—Far Eastern Unit.

Mr. Mumford served as a member of the Commission on Teacher Education, American Council of Education; also on the Council of Foreign Affairs and the Advisory Group, Central Valley Project Studies. He made the following talks: "Education for War and Peace," San Francisco Conference

of Teachers in the Bay Area, November 1942; "Education for an Integrated World," San Diego Teachers' Forum, March 1943; and "A Dynamic Program for Regional Development," Conference of Western State Governments, San Francisco, April 30, 1943.

Mr. Bestor continued research on the history of Fourierist socialism in the United States, 1840-1855; and on an edition of the Records of Brook Farm (as announced in *Journal of the History of Ideas*, 1 : 256, April 1940).

Mr. Chan offered courses in the literature, civilization, and language of China each of the four quarters. He also gave, in collaboration with Mr. F. Spiegelberg, a series of three courses in Far Eastern civilizations in the autumn, winter, and spring quarters. In the summer quarter he taught the Chinese language in the Far Eastern Area and Language Unit of the Army Specialized Training Program. His book *Chinese Reader for Beginners* is in the fourth printing. During the summer he worked on a romanized version of the book in syllabus form for use in the Army course. He also reviewed for the *Far Eastern Quarterly*. He attended the Twentieth Session of the Institute of World Affairs held at Riverside in December 1942, spoke on "China in War and Peace," and participated in the round-table discussion of Far Eastern problems in war and in peace. During the academic year he also spoke on subjects pertaining to the current war in the Pacific and to the cultural and social problems of the Far East to the following organizations: Stanford Alumni Annual Conference in San Francisco; Alumni Conference of the College of Physicians and Surgeons of San Francisco; Rotary International Annual Conference of the 106th District at Hanford; Stanford Alumni Conference at Los Angeles; Stanford Mothers' Club; Sacramento Masonic Lodge; Adult Center Public Forum, San Jose; Palo Alto Business and Professional Women's Club; Palo Alto Women's Club; Rotary Club of San Jose; Soroptimist Club of San Jose.

Mr. Smith acted as one of the book editors of the *Journal of Philosophy* and read a paper before the Stanford Philological Association, "Humanities in Times of Crisis."

JOHN WENDELL DODDS
Dean, School of Humanities

CLASSICS

The staff consisted of Hermann Ferdinand Fränkel, Hazel Dorothy Hansen, Raymond Davis Harriman, professors; Philip Whaley Harsh, associate professor; Lionel I. C. Pearson, assistant professor (on leave in the service of the British Army); Leib Schapiro, lecturer in Semitic languages.

In addition to their regular work the members of the department engaged in the following activities:

Mr. Fränkel served as Sather Professor of Classical Literature at the University of California for the spring term of 1943, and delivered there a series of lectures on "Ovid, a Poet between Two Worlds." During the year he prepared for publication by the University of California Press a book with the same title.

Miss Hansen continued to serve as a member of the Managing Committee for the American School of Classical Studies, Athens, Greece; as a member of its Committee on Placements; as contributing editor of *The American Journal of Archaeology*; as reviewer of *Antiquity* for *Classical Weekly*; and as secretary of the San Francisco Society of the Archaeological Institute. She devoted much time to the work of the Greek War Relief Association, as a member of the national committee and of the Women's Committee in San Francisco. Since the activation of the Army Specialized Training Program at Stanford in April, Miss Hansen taught additional classes in the curriculum on Foreign Area and Language Studies: European Area, devoting all of her time thereto during the summer quarter.

Mr. Harriman served as vice-president of the Philological Association of the Pacific Coast. In April he was released from his teaching to become Civilian Educational Adviser of the Specialized Training and Reclassification Program activated at Stanford.

Mr. Harsh continued to serve on the Committee on Monographs of the American Philological Association. He also completed the book on classical drama which has occupied much of his time during the past years.

Mr. Schapiro continued his work in the field of linguistics for the United States government.

RAYMOND DAVIS HARRIMAN
Executive Head

ENGLISH

The staff of the Department of English for the year 1942-43 consisted of William Hawley Davis, John W. Dodds, Albert Guérard (sabbatical leave), Hubert C. Heffner, Hoyt Hopewell Hudson, Arthur G. Kennedy, Edith R. Mirrieles, professors; Margery Bailey, John McClelland, Herbert Dean Meritt, Arthur Yvor Winters, associate professors; William Irvine, Francis Rarick Johnson (sabbatical leave), Ernest LeRoy Marchand, George Frank Sensabaugh, Virgil Keeble Whitaker (on leave), assistant professors; James Vincent Cunningham, John Lievsay, John K. Mathison, Oliver Mecartney Willard, instructors; Justus Kent Clark, Rebecca Arnell Dewey, Louise Shoup, Charles Wilson Thomas, acting instructors; Mrs. Mabel Ferry Halbert, secretary. Teaching assistants during the year were Thomas P. Carpenter, John A. Conley, A. Grove Day, John Hayden, John William Mackey, Margaret Bushnell Mathison, and Ruth Teiser.

The Doris Clayburgh Steiner Fellowships for the year were held by Jean Elizabeth Bowe, Wendy Downey, and Margaret Bushnell Mathison. A. Grove Day held the George Loomis Fellowship in American Literature.

Twenty-seven candidates were awarded the Bachelor of Arts degree during the year, one being graduated with great distinction and one with distinction.

Seven candidates received the Master's degree and presented theses as follows: Jean Elizabeth Bowe, "The Ethics of Edith Wharton as Presented in Her Writing"; David Theodore McAllister, "A Tentative Index to the

South English Legendary"; Robert Treat Smith, "Imagery and Allusion as a Source of Weakness in Browning's Dramas on the Stage"; A. Grove Day, "North American Indian Ritual Poetry in English Translation"; Howard Lewis Green, "A New Translation of Anatole France's *Thaïs*, with an Essay on the Principles of Translation"; Melvin Arthur Horton, "The Novels of Harold Bell Wright"; James Renwick Ray, "A Preliminary Bibliography of Modern English Translations of Middle English Verse to 1400."

The degree of Doctor of Philosophy was awarded to Bernice Frances Davies. Her dissertation was "The Social Status of the Middle Class Victorian Woman as It Is Interpreted in Representative Mid-Nineteenth Century Novels and Periodicals."

Miss Jean Elizabeth Bowe won the Clarence Urmy Award for Verse offered through the English Department by friends of Mr. Urmy. Judges who assigned the prize to Miss Bowe's poems, "Soles Occidere et Redire Possunt," were Dean Dodds of Humanities, Mrs. O. L. Elliott of Stanford University, and Mrs. Rudolf Altrocchi of Berkeley, California. Other students, whose work received honorable mention, were Mr. Lyonel Evans and Miss Ann Louise Bowman. Mr. Evans has done most of his writing at college under the supervision of Mr. McClelland; Miss Bowe and Miss Bowman have been disciplined in verse by Mr. Winters.

Miss Ann Louise Bowman shared first prize with a California woman student as a result of Stanford's entry of three poems in the contest for the Ina Coolbrith Award offered annually by the University of California to students of these universities: College of the Pacific, Mills College, Santa Clara College, St. Mary's College, Stanford University, and the University of San Francisco. Miss Bowman's successful verse was entitled "Poem." The other Stanford contributions chosen to represent Stanford by the verse committee of the English Department were by Mr. Lyonel Evans and Mr. Alan Baer. Mr. Evans' supervisor in writing has been mentioned; Mr. Baer was directed by Miss Bailey. Members of the committee on awards for verse in 1942-43 were Miss Bailey, chairman; Mr. Sensabaugh, and Mr. W. H. Davis.

Other students doing creative writing were Miss Wendy Downey and Miss Anne Dyer, both of whom worked under the supervision of Miss Mirrieles.

James Gunn, class of 1942, whose successful novel *Deadlier than the Male* was published last year, was offered a position on the writing staff of the United Artists cinema company, where he did outstanding work until his induction into the Army in April 1943.

During the winter quarter two members of the staff, Mr. Meritt and Mr. Winters, offered extra service to help in the increased load of composition. Mr. Irvine gave English 15, World Literature, in the absence of Mr. Guérard, in the same quarter. During the summer quarter, his vacation quarter, Mr. Winters gave English 190c at the request of a number of students.

Mr. Kennedy served as executive head of the department during the fall quarters. He published in the English Monograph Series of the National Council of Teachers of English, *English Usage. A Study in Policy and Procedure*.

Mr. Dodds served as dean of the School of Humanities and as director

the Army Specialized Training Program in the Far Eastern Area and Language Unit. (A full report of Mr. Dodds's activities will be found in the section on the School of Humanities.)

Mr. Guérard, who was on sabbatical leave, was with the Office of War Information in New York, from September 1942. He broadcast to France, mostly under his own name, comments, book reviews, and a series: Franco-American Friendship. His book *Napoleon III: an Interpretation* was published by the Harvard University Press in June 1943. Mr. Guérard wrote several articles on problems connected with the international situation, and in addition, kept up his reviewing for *The Nation*, *The New Republic*, and particularly *Books* (*New York Herald-Tribune*). He gave an address to the Graduate Club, French Department, at Columbia University.

Mr. Hudson spoke before the Northern California English Teachers Association at Sacramento, in November, on "The English Teachers' War." In February he addressed the Alumni Conference in San Francisco on the subject, "The Outlook for Higher Education." Mr. Hudson was editor of the report of the Humanities Conference.

Miss Mirrieles served as vice-president of the College English Association and as consultant to the Bureau of Indian Affairs.

Miss Bailey has supervised the work of Dramatists' Alliance, an alumni association which fosters original dramatic writing throughout the nation, draws the community theaters of the region into friendly contact with the University, and issues publications in mimeograph form which will be of interest to students of American imaginative writing. This year the semi-centennial publication, *Stanford Writers 1891-1941*, was sent at Mr. Winbigler's request to the Stanford representatives who work to encourage superior students in preparatory schools to attend the University; the 1942 publication, translated *Plays of the Southern Americas*, continues to go out to libraries and bureaus anxious to cement friendship with the nations of the southern continent—the Pan American Union requesting twenty copies and the United States Office of Education requiring one hundred and fifty. The work therefore may be considered part of Stanford's contribution to the political situation in uncertain times. Miss Bailey is editing a second group of these translations for the same association and the same purpose.

In the summer of 1943 Miss Bailey prepared for use as propaganda material (at the request of Mr. Raymond Rhodes of the Sacramento OPA office) several short war plays received in Dramatists' Alliance competitions of 1943.

In scholarly projects, Miss Bailey continues her work on the concordance to the poetical works of Edward Young; she has also begun a subject index of eighteenth-century novels as a means of testing popular or fashionable notions in support or destruction of the prevailing conceptions of general thought in the period.

One of Miss Bailey's tales for children (from the latest volume, *Whistle for Good Fortune*, 1941) was read by the Cleveland Public Library Children's Hour over CBS. Miss Bailey is at work on a fourth volume of these tales, based on authentic folklore motifs.

The Modern Language Association is publishing in 1943 in its General Series, Mr. Meritt's book, *Old English Glosses*. Mr. Meritt served as chairman of the Old English Group of the Modern Language Association and as

member of its Research Committee. He acted as vice-president of the College English Association of the Bay Region.

During the year Mr. Winters published a book of essays dealing with literary theory in general and the history of American literary theory in particular. The title of the book is *The Anatomy of Nonsense*, published by New Directions. The book contains long essays on Henry Adams, Wallace Stevens, T. S. Eliot, and John Crowe Ransom, along with general material by way of introduction and conclusion. Mr. Winters is now working on a full-length study of Edwin Arlington Robinson, which will ultimately be published by New Directions. He expects to publish a collection of poems through the same publisher within the next few months.

Mr. Irvine served as a member of the Nominating Committee for the Victorian Session of the Modern Language Conference. Since July 12 he has been engaged in teaching half-time in the European Language and Area School. He served on the Gas Rationing Committee of the University.

Mr. Johnson was awarded a Guggenheim Fellowship for 1942-43 to continue his studies in the history of scientific thought in Elizabethan England. He was absent on sabbatical leave for the year, spending the first half working in various libraries in the East and the latter half at the Huntington Library. While he was in the East, he spoke at the University of North Carolina, Brown University, and The Johns Hopkins University. He was also invited to contribute to a symposium on "Tradition and Innovation in Renaissance Science," which was published in the January 1943 issue of the *Journal of the History of Ideas*.

Mr. Marchand acted as chairman (the regular chairman being unable to serve) of the American Literature Section at the meeting of the Philological Association of the Pacific Coast, at the University of California in Los Angeles, November 27 and 28. He continues on the Bibliographical Committee of the American Literature Group of the Modern Language Association.

Mr. Sensabaugh continued as chairman of the Committee to Study English Curricula in the California State Educational System. He was instrumental in securing a thousand-dollar grant from the Rosenberg Foundation for an English curriculum survey throughout the state of California. He gave an address before the Stanford Research Club on "Tragedy and the Spirit of Science." He spoke before the California State Association of English Teachers, having as his topic, "The English Teacher in the Time of War." On August 11 and 12, 1943, he was a discussion leader at the Language Arts Institute on the panel "Choosing and Using Books for Purposeful Reading." Mr. Sensabaugh was awarded a Guggenheim Fellowship 1943-44, which has been deferred for the duration.

The Short Term Course in English for high-school students entered toward the end of the winter quarter was directed by Mr. Sensabaugh. was appointed assistant director in the Army Specialized Training Program.

Mr. Whitaker, who is on leave in Albuquerque, New Mexico, with the United States Bureau of Indian Affairs, is director of Boarding School at the Pueblo Jurisdiction and assistant to the Superintendent of the United States Indian School.

Mr. Cunningham, on leave from September to June, was an instructor

mathematics at the Pre-Flight (Pilot) School, at the Santa Ana Army Air Base. He returned for the summer quarter. A number of his poems will appear soon in the *New Mexico Quarterly*.

Mr. Lievsay spent the spring and summer quarters in research at the Huntington Library aided by a grant-in-aid of research from the Library. On August 23 he read a paper, "Prolegomena to the Diogenes Legend in the Renaissance" before the Library's Summer Seminar.

The English Department is making vital contributions to the war effort. Beginning in February, the department organized a special end-of-the-quarter course to be given to incoming high-school seniors. This course was designed to equip these students to take regular university work, which would enable them to complete at least a year of higher education before going into the service.

When the Army Specialized Training Program started on July 12, the English Department began teaching composition to four hundred basic engineers and premedical students. This program will continue through terms two and three for the basic engineers, and through terms two, three, four, and five for the premedical students. Terms two and three will cover the fundamentals of speech and reading, for both engineers and premedical students; terms four and five will concern English and American literature. As the program develops it becomes increasingly clear that the English Department is carrying a heavy load of Army work.

GERMANIC LANGUAGES

Staff.—Bayard Quincy Morgan, professor and executive head; Elizabeth Rossberg (Milwaukee-Downer College), acting professor (summer quarter); Kurt Frank Reinhardt, Anthony Eugene Sokol,† Friedrich Wilhelm Strothmann, Walter Vincent Kaulfers,‡ associate professors; Hughes Brewster, lecturer and instructor; Kurt Bergel,‡ Mrs. Grace Brown,‡ Mrs. Lillian Stephany Brown,‡ Carlton Earley Byrne,* Norbert Fuerst,‡ D. A. McKenzie,‡ Mrs. Jo Morgan,‡ Helena M. Nye,§ H. J. Popper,‡ R. Max Rogers,‡ Alice V. Schulz,‡ Theodore Verhaaren,‡ instructors; Mrs. Luise Strothmann,‡ Christof Wegelin, assistants in instruction; Mrs. Charlotte Irvine, secretary.

Enrolments.—As pointed out in our recent reports, while the trend in German enrolments has been rather steadily downward, first- and second-year classes have held their own or even increased. We attributed this in part to the fact that the chiefs of the Armed Forces recognized the military importance of German in a number of ways: by making German compulsory at West Point, by preparing German materials for the benefit of American soldiers, and by encouraging the study of German in Army camps.

In line with this policy, which we feel looks beyond the present conflict

* On leave for the entire academic year. † Loaned to the Asiatic School for the duration. ‡ Appointed especially to help with the instruction of Army officers and enlisted men. § On leave (sickness) for the spring quarter.

to the postwar period and its reconstruction problems, was the decision to inaugurate the Army Student Training Program, with Stanford as a training-ground for two principal areas, one of them Europe. Since German is bound to feature largely in the European scene, both now and hereafter, this program naturally involves emphasis on German as one of the chief subjects of instruction.

The result has been a phenomenal increase in our teaching responsibilities, indicated less by the aggregate enrolment—since the Army rightly insists on small sections in the language work—than by the unprecedented growth of our teaching staff shown above.

ASTP.—The Army Student Training Program has altered its complexion not a little since its formal inception on May 20, when the first unit began its instruction with twelve contact hours in German per week. The second unit is now having seventeen hours per week, and we anticipate further changes when the third unit assembles in October. In one respect, however, the form and framework of the course has been left unchanged and has if anything been strengthened in the course of time. That is due to the Army's insistence on oral-aural proficiency as the one indispensable objective of our language teaching.

It is this regulation more than any other feature of our work which has placed upon us the rather extraordinary burden we are now carrying. For it must be borne in mind that in recent years the language trend in American schools has been toward "reading knowledge" rather than speaking knowledge. As a consequence there is a large supply of excellent teaching material well suited to the acquisition of reading ability, but comparatively little on which a systematic course of instruction in speaking could be based, and practically nothing with the specific slant which the present situation indicates as desirable. It therefore soon became evident that we should have to create a suitable body of teaching material, and for weeks our staff has been engaged in this as a collaborative project. Upwards of seventy sheets of specialized vocabularies have been prepared, duplicated, and distributed to the members of the staff, and a good many of these are already in use in various sections. Now we have moved on to the next step, which is that of preparing connected matter of informative character to be used as a foundation for oral discussion and practice. This work is still actively going on at the present moment.

C.I.T.S.—The Civil Affairs Training School presented us with a different if allied set of problems. Here the trainees are all older men, ranging from thirty-five to fifty-five years of age, who are to be given as much German instruction as they can absorb in twelve weeks at twelve hours per week. The first screening of the forty-eight men produced a group of fairly proficient speakers, who need practice and drill, and a much larger contingent of beginners, who were divided into three equal sections. After a couple of weeks it became necessary to reshuffle the groups, and a new type of instruction was devised for about eight men who found language learning particularly difficult. Results here cannot yet be predicted with any confidence.

Civilian teaching.—Notwithstanding all the heavy extra burden of the Army teaching, we consider it imperative to take care of the needs and

wishes of our regular Stanford students. Since these cannot be foreseen with any accuracy, we are meeting the situation in two ways, first by adjusting our offerings to the actual requirements of the students enrolled in any given quarter, and second by extending the scope of our semi-independent or directed study so as to accommodate single students for whom regular classes cannot be provided. This will enable us, without overburdening too greatly the available teaching force, to give our more advanced students the kind of training they chiefly need. So far this plan has worked well.

Degrees.—The Bachelor's degree was conferred in June on Margaret Ann Brigham and Robert Lester Hampton. Miss Brigham graduated with honors and was elected to Phi Beta Kappa. The degree of Doctor of Philosophy was granted to Irene M. Huber, with the thesis, "The Position of Women in the Naturalistic Social Novel in Germany," and to Donald A. McKenzie, with the thesis, "Otfried Viewed as Commentator on the Vulgate."

Dissertations.—A number of the dissertations previously mentioned in these reports have been brought to completion; the one which is still actively in process is that of M. L. Nielsen dealing with the novelette in twentieth-century Germany.

Summer quarter.—Although undergraduate enrolments kept pace with those of last summer, necessitating the appointment of additional teachers to replace those transferred to Army teaching, it proved possible for the resident staff, none of whom took leave of absence this year, to take care of the advanced work of the department.

Departmental activities

1. *Staff meetings.*—While the general character of these meetings has not changed since they were first instituted here by the undersigned, they have recently taken on a new importance in view of the increase in staff and the multiplying of our teaching problems. We are now holding weekly meetings, and expect to continue that practice hereafter.

2. *Public affairs.*—In connection with a project in which Dean Kefauver of the School of Education has become deeply interested, that of postwar education and its organization and promotion, members of the German Department were drawn in as consultants and collaborators, and a substantial "Report on Postwar Education in Germany," cast into final form by Professors Morgan and Strothmann, with advice and assistance from Professors Reinhardt and Sokol and other colleagues, was completed early in March. As one consequence of this contribution of ours, Professor Morgan was called to Washington at the end of March to participate in conferences dealing with the general topic of postwar education, but more particularly concerned with education in Germany. The end of March also witnessed another instance of rather important functioning on our part, when Professors Morgan and Sokol journeyed to Chicago with a Stanford delegation to discuss plans for the formation and operation of such Army training programs as are now in action here. Professor Morgan has been appointed assistant director for foreign language in connection with these programs.

3. *William Alpha Cooper Prizes in German.*—Despite the fact that the war had reduced German enrolments in many schools, and had led to the

discontinuance of German instruction in some of them, we decided to conduct our contest as usual. It was gratifying to us that the contest brought in 89 entries from 25 different schools. Our prose passage was taken from a charming account of the Christmas legend so dear to the German heart, and one of Germany's principal gifts to the world; the poem, entitled "The Patient," was heartening in its affirmation of life. As in other years, Professors Bell and Price at Berkeley assisted in judging the translations; and in general the conduct of the contest followed the lines which, long established, have approved themselves to our schools and their pupils.

4. *Departmental News Bulletin*.—This year, in view of the new tasks suddenly assumed by us, we sent out our report under the arresting title, *The German Department Goes to War*, with corresponding emphasis upon our war work. Responses from various quarters indicate that the report was widely read and favorably received.

Projects in process.—As indicated above, the entire department is now busy with the preparation of teaching materials for the Army courses. This work takes precedence of all other undertakings, and will continue to do so. Nevertheless, there are some other items which deserve at least brief mention.

Professor Morgan has been invited to write critical sketches of eight contemporary German writers for a forthcoming dictionary of literature to be published under the sponsorship of Columbia University. The articles are in preparation. He has also undertaken to read proof on some publications left unfinished by his lately deceased colleague, Peter Hagboldt.

Professor Reinhardt has now completed the manuscript of the book on *Perennial Philosophy* mentioned in our last annual report; publication is promised at an early date.

Professors Morgan and Strothmann are now reading proof on the revised second-year reader mentioned in our last annual report; in view of the difficulties which publishers are facing at present with respect to both labor and materials, we regard Ginn's decision to go ahead with the book as a rather striking evidence of their confidence in its merit.

Personals.—Public addresses by members of the staff during the year include the following: by Professor Morgan: "Doctor's Oral: or, What Do You Teach?" (Stanford Philological Society, November); "A Plan for Action" (Modern Language Teachers, San Francisco, December); "The Culbertson Plan of World Federation" (three times, different local groups); "Postwar Education in Germany" (Stanford Y.W.C.A., spring); by Professor Reinhardt: "Spengler's Philosophy and the Western Tradition" (1: lectures, University of California Extension Division, autumn semester, San Francisco); "The Philosophical Bases of Freedom" (*ibid.*, winter semester); "The Crisis of Our Age" (Paulist Library, San Francisco); "The Future of Europe" (Holy Name Society, Redwood City); "Christianity and International Relations" (Palo Alto); "The Political Philosophy of German Romanticism" (St. Patrick's Seminary, Menlo Park); "A Christian Peace" (Thomas More Society, San Francisco); by Professor Sokol: "Naval Strategy" (Stanford, November); "The Role of Sea Power" (San Mateo, January); by Professor Strothmann: "Martin Luther and the Totalitarian State" (Stanford Philological Society).

Professor Morgan sent out in September some 1,200 copies of an "Open Letter to Teachers of Language," urging that they consolidate their forces in the interest of mutual protection and support.

Professor Morgan and his wife and daughter participated in eight performances of *Charley's Aunt* given at various Army camps in the vicinity, as a contribution of the Stanford Players to the soldiers' entertainment.

Professor Strothmann served as chairman of the committee on arrangements of the first Stanford Conference on the Humanities: a responsible and important assignment successfully carried out under very difficult conditions.

Publications.—Professor Morgan has published: *Readings in Military German* (in collaboration) printed by D. C. Heath and Co.; "The Eternal Subjunctive" (*Monatshefte*, February 1943); reviews of MacIntyre's *Translations from Rilke* and Priest's translation of Goethe's *Faust* (*JEGPh*, May).

Professor Reinhardt published *The Commonwealth of Nations and the Papacy*, a pamphlet put out by the Bruce Company in Milwaukee.

Necrology.—On March 17, Camillo von Klenze, who had taught at Stanford in 1930 and 1934, and who had returned to the campus in June 1942, passed away quietly at the age of seventy-seven. He left an unpublished monograph of considerable importance, the fruit of studies extending over many years, dealing with the concept of the noble savage in relation to Goethe's *Iphigenie auf Tauris*. His widow is now preparing this for publication.

BAYARD QUINCY MORGAN
Executive Head

DIVISION OF GRAPHIC ART

The division faculty for the year included Edward McNeil Farmer, associate professor, who served as acting executive head during the winter, spring, and summer quarters; Daniel Marcus Mendelowitz, assistant professor, who served as acting executive head during the autumn quarter; Victor Mikhail Arnautoff, assistant professor; Charlotte L. Doty, teaching assistant; and Eugene Valentine Ward, lecturer in architectural engineering, who is also a member of the Department of Civil Engineering.

Thirty-one undergraduate (upper-division) students were registered as majors in Graphic Art and the degree of Bachelor of Arts was granted to twenty-one. Three students were registered for graduate work, but no advanced degrees were granted.

The yearly total class enrolment for the past seven years is shown in the following table, together with the number of Graphic Art majors (both upper-division and graduate).

	1936-37	1937-38	1938-39	1939-40	1940-41	1941-42	1942-43
Students....	975	1,107	1,244	1,260	1,432	1,041	721
Majors.....	31	33	43	50	46	48	34

The drop in general enrolment in art classes is not surprising at the present time when the students remaining in school have been urged to turn their attention to subjects more obviously and immediately useful in the war

effort. While enrolment in the usually large general lecture courses is only about 25 per cent of the normal average, the enrolment in technical courses has dropped very little so that the demands on the teaching staff have not been noticeably reduced. As part-time instructors have not been available, two full-time members of the staff taught half-time during their vacation quarters.

Aside from regular teaching and administrative duties, Mr. Farmer attended pattern-making and industrial-drafting classes at the Peninsula National Defense Training Center during the autumn and winter quarters, and worked part time as architectural renderer and draftsman with a Palo Alto architectural firm engaged in work for defense industries.

Aside from his duties in the Division of Graphic Art, Mr. Mendelowitz exhibited two watercolors at the Santa Cruz Art Club Annual Exhibition of California Artists for 1943 and received an "Honorable Mention" on the watercolor "Barges, East River"; held a one-man exhibition of watercolor and oil paintings in November 1942 at the Toledo Museum of Art School, Toledo, Ohio; held a one-man exhibition of watercolors and oil paintings at the Palo Alto Art Club; painted several portraits, among which was a portrait of Arthur Bridgman Clark, emeritus professor of graphic art. The painting will be hung in the Graphic Art building. Mr. Mendelowitz wrote a section on "Graphic Arts" as co-author with the Stanford School of Education Faculty in *Education in Wartime and After* (D. Appleton-Century Co., New York, 1943); delivered a lecture on "Contemporary American Painting" to the Lindsay Art Association, Lindsay, California, on January 11, 1943. Mr. Mendelowitz served on the committees on "Stanford Conference on the Humanities in the War and the Post-War World"; chaired (with Miss Hazel Hansen) a committee which assembled and published a catalogue of the slide collections in the School of Humanities; served on the School of Humanities Library Committee; served as third vice-president and chairman of the Membership Committee for the Pacific Arts Association.

Aside from his teaching in the Division of Graphic Art, Mr. Arnautoff participated in a competition for murals organized by the Section of Fine Arts, Public Buildings Administration, Washington, D.C.; served on the jury for the Albert Bender Annual Scholarship (grant-in-aid); participated in exhibition of self-portraits at the M. H. deYoung Memorial Museum in Golden Gate Park, San Francisco. Mr. Arnautoff continued his work as a member of the executive board of Russian War Relief, Inc., as president of the Russian-American Society, and as a member of the executive board of the American-Russian Institute.

Aside from teaching the graphic art course in scientific drawing, Mrs. Doty spent the greater part of the year in studies toward the Master's degree. In conjunction with this she completed and published, as co-author with Dr. A. Myra Keen, *An Annotated Check List of the Gastropods of Cape Arago, Oregon*. During the year Mrs. Doty completed a number of drawings, retouched photographs, and arranged plates for Dr. Hubert G. Schenck; made two map drawings for Dr. Hans E. Thalmann, two wall charts for the School of Biology, and two drawings of muscle dissection for Dr. Donald J. Gray.

Only minor additions to equipment were made during the year. The colored-slide collection was added to and continual additions have been made to the colored reproductions of paintings mostly in the field of contemporary American painting.

The decreased general enrolment in art classes does not indicate a decreased need for staff and equipment, as during the past decade the Division of Graphic Art has been seriously understaffed and underequipped in relation to the demands which the students have made upon it. It is to be hoped that during the present war crisis the educational and social value of practical art training will not be overlooked.

EDWARD M. FARMER
*Acting Executive Head
Division of Graphic Art*

DIVISION OF MUSIC

Faculty and courses of study.—The faculty of the Division of Music has undergone certain changes under war conditions, but has functioned as follows:

Warren D. Allen, professor of music and education, offered twelve courses, as follows: Music 1, "Choir," for four quarters throughout the year; Music 2, "Chorus," spring quarter; Music 11, "Elementary Musicianship," summer quarter; Music 91, "Music and Society," summer quarter; Music 99, "The March," autumn quarter; Music 100, "Melodic Arts," autumn and winter quarters; Music 101, "Harmonic Arts," winter quarter; Music 102, "Symphonic Arts," spring quarter; Music 114, "Music, Speech, and Dance," spring quarter; Music 162, "Music Education," winter quarter; Music 190, 191, and 192, "Music History Seminars," autumn, spring, and summer quarters; Music 199, "Individual Work."

In addition to the foregoing courses, six lectures on "Music and History" were given in "History of Western Civilization," for freshmen. These were repetitions for three quarters of "The Foundations of Modern Music," in History 11, and "The March in Modern Society," in History 12.

A new course on music for the School of Humanities is being planned for the autumn quarter, to be known as "Introduction to Music," Humanities 15.

Herbert Jan Popper, assistant professor of music, served also as a member of the faculty in Speech and Drama. He offered ten courses, as follows: Music 3, "Theater Orchestra," winter quarter, in conjunction with Music 170; Music 51, "Musical Fundamentals," winter and spring quarters; Music 58, "Score-Reading," autumn quarter; Music 90, "Introduction to Music Literature," spring quarter; Music 105, "History of Opera," winter quarter; Music 113, "Dramatic Music," spring quarter; Music 151, "Musical Fundamentals (Advanced)," winter and spring quarters; Music 152, "Music Writing," spring quarter; Music 170, "Opera Workshop," autumn, winter, and spring quarters; Music 199, "Individual Work," autumn and spring quarters.

Dr. Popper took up full-time work in the Army Language and Area School in July. He and Warren D. Allen also gave four lectures on military music in the School for Military Administration, beginning August 18.

Ferenc Molnar was reappointed associate professor of music for 1943-44 by the Chancellor. In addition to his full-time duties as acting associate professor of mechanical engineering (including courses in the A.S.T.P. and E.S.M.W.T.), he offered three courses in the Division of Music, as follows: Music 3, "Concert Orchestra," autumn and spring quarters; Music 31, "Chamber Music," autumn, winter, and spring quarters; Music 199, "Individual Work," winter quarter.

Joseph M. Running, assistant organist, was able to carry on until April 25, when he was called up for the Army. He is now studying Japanese at the University of Michigan. In addition to his work with organ and choir, Mr. Running offered Music 11, "Elementary Musicianship," in the autumn quarter.

Graduate students in music education numbered six, as follows: Mrs. Pauline K. Campbell, of Philadelphia; Miss Edith James, of Monterey; Miss Ann Elizabeth Miller, of San Jose; Miss Corinne Pauw, teacher of music in the Pittsburg (California) Public Schools; Mrs. Edith Reed, of the Palo Alto schools; Mr. Gustavus Smith, director of music in the Mountain View High School.

Registrations in the Division of Music totaled 507, exclusive of auditors and registrations without credit, comparing favorably with previous years in spite of war conditions. Owing to the latter, the lecture courses previously offered by Mr. Molnar were not given, and the courses in Band were discontinued. The Band is missed very keenly. Its absence is conspicuous on a militarized campus. It is hoped that a soldier band may be possible next year. It is urged that after the war the Band be supported as a musical organization, not merely as an appendage to athletic events.

Music in the Memorial Church.—Forty-seven organ recitals were given by Warren D. Allen on Thursdays and Sundays. Thirteen organ recitals were given by Joseph M. Running on Thursdays and Sundays. One recital was given by Lyle Mayer.

The following soloists gave generously of their talents in the church services and recitals: Marjorie Sherman, contralto; Ferenc Molnar, viola; Beatrice Hagen, soprano; Edwin Kappel, tenor; Jane Bronson, harp; Elizabeth Moser Breed, violin; Ann Elizabeth Miller, contralto; Samuel Hungerford, violin; Elizabeth Peirce Kincade, violin; Pauline K. Campbell, soprano; Herbert Cabral, tenor; Corporal Francis Rogier, baritone; Pfc. Heinz Baermann, baritone; and Cantor R. R. Rinder, of Temple Emanu-El, San Francisco, with whom the choir sang the Jewish Temple Service on May 9.

The University Choir has kept up its standard, and has even improved in numbers and in excellence with the influx of soldier students.

The following special concerts were given during the year:

November 15—Selections from *Judas Maccabaeus* (Handel). This was recorded for broadcast to the University of Chile in honor of the centenary celebration of that institution. The program was arranged and directed by Warren D. Allen in collaboration with NBC, the Co-ordinator of Inter-

American Affairs, the Office of War Information, and Mrs. Maria Hoge, secretary of Inter-American Studies in the Hoover Library.

December 6.—Handel's oratorio, *Judas Maccabaeus*. This was given in its entirety for the general public. The University Choir, Warren D. Allen, director, was augmented by the Opera Workshop Chorus, under Dr. Popper, and accompanied by the Stanford Orchestra, with the collaboration of Mr. Molnar, and Joseph M. Running at the organ. The soloists were: Pauline K. Campbell, soprano; Elizabeth Popper, contralto; Larry Glover, tenor; Marsden Argall and Herbert J. Cabral, baritones. Handel's "Concerto Grosso in B Flat" was played by the orchestra, under Mr. Molnar's direction, on this same program.

Founders' Day, March 9.—Members of the San Francisco Symphony Orchestra—Julius Haug (violin), Merrill Remington (oboe and English horn), Henry Woempner (flute), and Rudolph Schmitt (clarinet), with Edward Haug (trumpet), and Marino Sensi (baritone)—assisted the organist and the University Choir in a program of ensemble and concerto selections by Bach, Handel, Mozart, and Beethoven.

August 22.—Selections from Mendelssohn's *Elijah* and other numbers were presented by the choir, orchestra, and soloists, under the direction of Warren D. Allen. The orchestra, under the direction of Ferenc Molnar, accompanied the latter in the slow movement of Mendelssohn's "Violin Concerto." The *Elijah* soloists were Pauline K. Campbell, Elizabeth Popper, and Corporal Francis Rogier.

Chamber Music and Orchestra concerts.—In addition to participation in these joint programs in the church, the Chamber Music Groups and Orchestra, under Mr. Molnar, appeared in seven programs, as follows:

November 11.—Concert by the Stanford Chamber Music Groups

November 16.—Concert by the Stanford Chamber Music Groups at Castilleja School

January 28.—Concert by the Stanford Symphony Orchestra, with Frank Houser as guest artist

April 7.—Concert by the Stanford Chamber Music Groups

May 4.—A Tuesday Evening program of eighteenth-century music for harpsichord and orchestra featured Mme. Alice Ehlers, under the auspices of the Committee on Public Exercises. Mr. Willard J. Flashman, flutist, appeared with Mme. Ehlers, Mr. Molnar, and the orchestra in Bach's "Fifth Brandenburg Concerto." Mme. Ehlers played a group of solos and Haydn's "Concerto in D Major" for harpsichord and orchestra.

May 10.—Concert by the Chamber Music Groups, Women's Faculty Club

May 18.—Concert by the Chamber Music Groups, Stanford Mothers' Club

On May 23, members of the University of California Orchestra and Chorus, under Professor Albert Elkus, visited us and gave a program of eighteenth-century music. One feature of the program was J. S. Bach's cantata, "My Dearest Jesu." Members of the Stanford Choir assisted the University of California singers on the chorales. Professor David Boyden played a harpsichord loaned for the occasion by its maker, Julius Wahl of Los Altos.

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The Associated Students Concert Series presented the following artists during the year :

October 29—Jascha Heifetz, violinist
January 25—Igor Gorin, baritone
March 31—Dorothy Maynor, soprano
May 6—Artur Rubinstein
August 5—John Charles Thomas

Music at the Humanities Conference.—At the conference sponsored by the School of Humanities on May 7 and 8, the following representatives of other music faculties were present :

Alfred Elkus and Manfred Bukofzer, University of California
Lee Pattison and Kenneth Fiske, Pomona College
Walter Rubsamen, University of California at Los Angeles
Margaret Prall, Mills College
Russell Bodley and John Charles Elliott, College of the Pacific

Informal discussions were held after the regular sessions, at the Family Farm and at the home of Warren D. Allen. Ideas concerning music, its relations to Humanities curricula, and to the war, were exchanged. Sentiment favored the organization of a Collegiate Music Conference at some future date.

Gifts and grants.—The Friends of Music once more co-operated with the Elizabeth Sprague Coolidge Foundation in the Library of Congress, to bring back the London String Quartet for four memorable concerts during July. Owing to the death of Thomas Petre earlier in the year, Laurent Halleux, well known to Stanford for his work with the Pro Arte Quartet, was the second violinist. The other three were, as last year, John Pennington, William Primrose, and C. Warwick Evans. Each program featured a quartet by Brahms, preceded by an old or new novelty (Cherubini, Verdi, Toch, and Szostakovicz) and followed by Mozart or Haydn.

This marks the twelfth consecutive summer in which chamber music programs have been given to the Stanford community. To Mrs. Coolidge and the Friends of Music, again many thanks for these generous contributions to our musical life.

In addition, the Friends of Music gave financial aid to the Division for the Handel Concert in December, the lectures by Dr. McManus, the Orchestra and Chamber Music Programs, the visit from the University of California Orchestra, and the Opera Workshop. To the Committee on Public Exercises aid was given to bring Mme. Ehlers, harpsichordist. Individual members of the Friends of Music made gifts for the Opera Workshop and

music library. Among them, Miss May Sinsheimer gave \$25.00, which was used for the purchase of orchestral scores by modern composers.

The Rockefeller Foundation, in July, granted \$2,500 to Stanford to supplement Warren D. Allen's sabbatical salary next year to enable him to complete his forthcoming work on *Music and Society*. Steps toward this book were taken during the past year, with private publication of a preliminary mimeographed edition for class use. The Stanford University Press brought out *Our Marching Civilization*, "an introduction to the study of music and society."

Plans for the coming year.—The following new appointments have been made for 1943-44:

D. Sterling Wheelwright, formerly of the Washington Chapel in Washington, D.C., will be acting organist and lecturer in music, substituting for Warren D. Allen, who will be on sabbatical leave. Mr. Wheelwright has just completed his studies for the Ph.D. degree at the University of Maryland.

Elmer H. Young, director of music in the Burlingame High School, will give courses as lecturer in music education in the winter, spring, and summer quarters. Mr. Young is eminently successful in demonstrating methods of instruction in orchestra, chorus, and general musicianship.

Alfred Frankenstein, music and art editor of the *San Francisco Chronicle*, will offer a course on some phase of music literature, history, and criticism in the summer quarter.

Dr. Popper is now on full time as a member of the Language and Arts School, which is now part of Stanford's Army program. He has also been asked to prepare men for overseas service so that they will know the music of the countries they enter and its importance in influencing people. He will continue in this Division in an advisory capacity, especially in the new School of Humanities course—"Introduction to Music." He will also continue to act in an advisory capacity in the Department of Speech and Drama as occasion arises, as it did during the summer, with the opera presented to the Radio Institute.

Mr. Molnar, in addition to his teaching of engineering, will continue with his work in chamber music and orchestra. Some soldier students are arriving who have had experience as instrumentalists, several as soloists. They welcome opportunities to make music in their leisure time.

The Memorial Church will probably be the best, if not the only, center for choral and orchestral music next year, as the Memorial Hall will be in use by the Army. The various members of the staff will use the orchestra, therefore, not as a concert organization primarily, but as a support to singers under Mr. Wheelwright, as a proving ground for music-education classes under Mr. Young, or occasionally in the theater with Dr. Popper. It is to be hoped that the personnel will be adequate for at least one orchestral concert under Mr. Molnar. This co-operative functioning of choral and instrumental classes worked very well during this past year.

During the absence of the executive head of the Division, Dr. Popper is authorized to act on matters of policy and schedules.

The long-range prospect.—While the student body changes from the var-

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Mr. Mauricio Wellisch, vice-consul for Brazil in San Francisco, served as assistant in Portuguese during the autumn, winter, and spring quarters.

Fourteen students received the degree of Bachelor of Arts.

One student received the degree of Master of Arts and presented a thesis as follows: Hortense Doyle, "Typical Contributions of Savoy to French Literature."

One student received the degree of Doctor of Philosophy, presenting a thesis as follows: William DeRochebrune Moellering, "The Elements of *Costumbrismo* in Pereda's *Escenas Montañesas*."

The research and extracurricular activities of the members of the department may be briefly summarized as follows:

Mr. Anderson has continued his preparation of his studies on Logic. These studies have grown to such proportions that they will be divided and published in four separate volumes, the first of which will probably be published during the coming year. Its title will be, *The Letter and the Spirit*. Part of one of its important chapters, "Poetry and Science," was published in *The Friend*, edited by Dr. D. Elton Trueblood.

From May until August, Mr. Anderson taught one of the sections of the Initial Italian for the European Area and Language School, aside from his usual amount of regular University instruction.

Mr. Espinosa has finished his comparative study of the *Cuentos populares españoles*, with the exception of the proper organization and final checking of the bibliographical materials. There remain to be done, also, the final examination and preparation for printing of the entire 1,000-page manuscript now finished. A brief account of the materials that it contains is to be found in the departmental report of last year. The work on the bibliography and the preparation of the manuscript for printing has been temporarily delayed since May of 1943, on account of the additional labors undertaken by the investigator in view of his appointment as Assistant Director for Romanic Languages for the European Area and Language School. In addition to all this, Mr. Espinosa has continued his usual amount of teaching and administrative work, and he has also taken charge of the examination of hundreds of soldiers from the S.T.A.R. groups in the various Romanic languages, with the help of most of the members of the regular department staff.

From May until August, Mr. Espinosa also taught a class in Initial Italian in the European Area and Language School, and from August to October, one class in Initial Spanish.

During the year Mr. Espinosa gave various lectures on Spanish history and literature in Palo Alto and San Francisco, and he also was one of the speakers at the Peace Forum held in San Francisco in May by the National Council of Catholic Women.

Mr. Hilton dedicated most of his time during the year aside from teaching to the forthcoming edition of *Who's Who in Latin America*, of which he is the new editor. During the summer he was granted a leave of absence from June until April, to enable him to travel throughout Central and South America in search of the material for his future work.

In May and June, Mr. Hilton gave a series of sixteen lectures on "Italian Geography and Culture" for the European Area and Language School.

During the year Mr. Hilton gave various lectures on "Hispanic History and Culture" to the American Association of University Women, Sociedad Hispánica, Pacific House, and Modern Language Teachers Association, in Palo Alto and San Francisco.

Mr. Lemaitre has been working all year on his *Biography of Victor Hugo*, which was ready for publication in October.

On January 3, 1943, Mr. Lemaitre gave a radio address over NBC on Gladys Lindner's book entitled *Marcel Proust*, published by the Stanford University Press.

Mr. Naughton has continued his studies in the life and works of the Abbé de Saint-Pierre.

Mr. Schwartz completed during the year his assignment for the *Columbia Dictionary of Modern Languages*, and presided at the meeting of the French Section of the Philological Association of the Pacific Coast at Los Angeles during the Thanksgiving recess.

During the winter and summer quarters Mr. Schwartz served as full-time instructor in Japanese in the Far Eastern Area and Language Unit. In connection with this work he also assisted the cataloguers of the Library in classifying Japanese books.

Mr. Rael has been working during the year in a classification and study of a large collection of New Mexican popular hymns (*alabados*), with special attention to the music, which in some cases is old and traditional. He has also worked on a catalogue of all the materials of the unpublished manuscript collections of New Mexican and Spanish folklore now in his possession and in that of Mr. Espinosa. The numerous manuscripts which they both possess of the famous New Mexican religious folk-plays are much older and better than those collected in recent years by other folklorists.

Mr. Rael has also taken a very active part during the year in the work of the Spanish honor society, Sigma Delta Pi, directing many of their plays and other activities.

The number of students registered in the department decreased with the decreased University registration during the year. The total number of class registrations during the year was 2,784 instead of 3,118 for the year 1941-42, a decrease of 324 or about 10 per cent. For the two important languages of the department the registration was as follows for each of the four quarters:

	Autumn	Winter	Spring	Summer	Total
French.....	357	315	220	98	990
Spanish.....	512	525	338	147	1,522

The decrease in French for the four quarters from the year 1941-42 was 184, or about 16 per cent; in Spanish it was 113, or about 7 per cent.

The number of majors in the department is not listed here because all our Romanic Language majors are now listed in the University publications as majors in the School of Humanities. They were actually a few less than for the year 1941-42. The graduate students are very few, and probably will continue to decrease in numbers for the duration of the war. A few of our advanced classes in French and Spanish literature, however, continue to attract the usual number of students.

During the year the department has taken an active part in the Army instruction for the European Area and Language School, directed by Dean Cottrell, and of which the executive head of the Department of Romanic Languages is assistant director for Romanic Languages. The first group of soldiers arrived in the middle of May, and thirty of these registered for instruction in Italian. In July another and much larger group arrived, and classes were organized for them in French, Spanish, and Italian, as follows: 62 in elementary, intermediate, and advanced French; 43 in elementary, intermediate, and advanced Spanish; and 50 in elementary and intermediate Italian. The courses are of an intensive character, the students meeting the instructor three periods a day for five days a week; and the method followed is an eclectic, direct method, with special emphasis on conversation and oral practice.

For the instruction of this school the appointment of many special instructors became necessary. Aside from these, however, instruction was also given by some of the members of the regular staff of the Department of Romanic Languages: Mr. Anderson, Mr. Espinosa, and Mr. Smith. This was in addition to their regular University classes and other duties. The instructors appointed especially for the European Area and Language School for instruction in French, Spanish, and Italian from May to October for one or more quarters were the following: Mr. Ernesto Catalano, Mr. Louis Adolph Gaillard, Mr. John Roland Jacobs, Dr. Giacinto Matteucig, Dr. Alexander E. Naughton, Dr. Luigi Domenico Sandri, and Mr. Roberto Benaglia Sangiorgi. The following teachers assisted for brief periods of instruction in Italian: Mr. Walter Bava, Mr. Miguel Tirado, Dr. Guillermo Marino, and Miss Flora Clara Grossi.

AURELIO M. ESPINOSA

*Executive Head of the Department
of Romanic Languages*

SLAVIC LANGUAGES

The educational program of the Slavic department has been considerably curtailed this year owing to the absence of Dr. Bryner. Dr. Bryner's classes in Czech and Serbo-Croatian were discontinued. His class in Elementary Russian was given by Dr. Lanz.

The number of students registered for Russian language was considerably increased. At one time it reached the impressive number of twenty, the largest number of students for Russian in the history of the department. A special course was specifically designed in connection with the defense program for those students who wished to become acquainted with the elements of Russian language in a reasonably short time (six units). A regional program for the study of Poland and Russia was arranged with one advanced student registered for it.

Mr. Lanz participated in the European Area and Language Program

(9 L) for the Army by conducting a seminar on Poland. Mimeographed reports of the proceedings of that seminar are now available for the public and for the Army.

HENRY LANZ

Professor of Slavic Languages

SPEECH AND DRAMA

Staff.—The staff consisted of Lee Emerson Bassett, professor emeritus; Hubert Crouse Heffner, professor of dramatic literature and executive head of the department; Virgil Antris Anderson, Elisabeth Lee Buckingham (on leave), Leland Taylor Chapin, James Gordon Emerson, associate professors; Claire MacGregor Loftus, H. Donald Winbigler, assistant professors; Harlen M. Adams, Baxter Geeting, acting assistant professors; F. Cowles Strickland, director of dramatics; Charles Vance (on leave), associate director of dramatics; Waldemar Johansen (on leave), technical director of dramatics; John Ford Sollers, associate technical director of dramatics; Herbert Jan Popper, assistant professor of music and director of opera workshop; Hazel Brain, D. Paul McKelvey, instructors; Alladine Bell, Norman Philbrick, acting instructors; David Wieder Sievers, assistant director of dramatics; William M. Girvan, Muriel Lievsay, assistant technical directors of dramatics; Hazel Glaister Robertson, Ralph Emerson Welles, lecturers in dramatic art; Samuel Dickson, Floyd Farr, John Grover, Don Hall, Earl Lee, lecturers (Radio Institute), summer quarter; Aubrey Herrington, James Kessler, Bernice Linden, James Walters, assistants in instruction; Skipwith Athey, Paul Hostetler, Harold Levitt, technical assistants.

Degrees and credentials.—A total of twenty-five students pursued graduate work in the department, nineteen of whom worked toward their Master of Arts degree and one toward a Doctor of Philosophy degree. Twenty-one candidates received the degree of Bachelor of Arts, two with distinction. Among candidates who were granted the teachers' credential in the School of Education, six were majors and one was a minor in speech and drama. Seventy-one individual speech tests were given to candidates for the teachers' credential in the School of Education by Professor Winbigler. Following his test, each candidate received in private conference a detailed analysis of his skills in speaking and in reading as evidenced in the test, as well as individual help and guidance. This year, as in former years, the department (in conjunction with the School of Education) offered work leading to a special credential in the correction of speech defects, under the direction of Dr. Virgil Anderson. During the year, four candidates completed this program and were recommended for this credential.

The following candidates completed requirements for the Master's degree with thesis subjects as indicated: Alice Donaldson, "The Women Characters in the Plays of Eugene O'Neill"; Lyle Mayer, "Methods Used to Achieve Climax in the Plays of Eugene O'Neill."

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The registration by quarters was as follows :

	Graduates	Under- graduates	Speech Majors	Total Registration
Autumn.....	14	337	36	387
Winter.....	15	311	44	370
Spring.....	10	216	41	267
Summer.....	20	268	25	313
				1,337

Speech Clinic.—The Speech Clinic, under the direction of Dr. Virgil Anderson, reported total registration for the year as follows :

	Cases	Clinicians
Autumn	20	4
Winter	30	11
Spring	35	10
Summer	22	6
	107	31

Total individual cases treated in the Clinic.....68

Total students receiving training as clinicians.....15

Of the total cases treated, fifty-one were handled for one quarter, ten remained in the Clinic for two quarters, and seven for three quarters. As in previous years, the majority of the cases handled in the Clinic were university students. However, four were children ranging in age from four years to nine years, and four were members of the faculty, wives of the faculty, or children of the faculty. This service was again extended without charge and with no academic credit being given. Despite the pronounced drop in civilian enrolment throughout the University last year, it is noteworthy that both the number of cases treated and the total enrolment in the Clinic increased over the previous year. A wide range of cases were treated, including foreign dialect, cleft palate, stuttering, delayed speech, defective speech arising from personality maladjustment, and a large number of vocal and articulatory disorders of both a functional and organic nature. With the exception of the articulatory disorders, the largest category was foreign dialect. In all, fifteen students, representing eight different foreign-language backgrounds, received help in the Clinic. The foregoing figures do not include a considerable number of speech examinations and special conferences given to students who were sent in by instructors or who came voluntarily. This was done by the Clinic director. The time given to each case averaged one hour per week, ordinarily divided into two half-hour periods. Instruction was given individually.

The Stanford Players.—The Stanford Players continued their program of regular public productions in co-ordination with courses in the field of theater and drama. The public performances included eight plays, which were produced for a total of twenty-nine performances, eleven in the Auditorium and eighteen in the Little Theater. A total of 421 persons participated in these performances before a total audience of 8,841—5,766 in the Auditorium and 3,075 in the Little Theater. Of these eight plays, one was

ritten by Miss Alladine Bell, a member of our staff and a former student of the department. Her first play, *Daisies on the Car Tracks*, was produced last season by the Stanford Players and was published by Samuel French, Inc. It has since been presented by many high-school and community theater groups and was taken on tour of Army camps on the West Coast. In addition to the season's regular program, ten performances of *Charley's Aunt* were given by the Stanford Players at Army and Navy camps in the Bay Area and vicinity by a cast selected from members of the faculty. The cast of another play, *Squaring the Circle*, also played at one Army and one Navy camp following the Stanford performances. As a further activity, the Stanford Players presented two play readings, *The Chalk Circle* and *Oedipus Rex*, both of which were offered to season-ticket holders without charge. In addition, *Oedipus Rex* was presented to the students of the classes in Western Civilization. The performances of the winter quarter play, *In Time to Come*, were made available without charge to students in the School of Humanities. A total of 456 students availed themselves of this opportunity.

The NBC-Stanford Radio Institute.—An enterprise different from anything previously undertaken by the department was an important part of the summer quarter's work. In collaboration with the National Broadcasting Company and Station KPO, San Francisco, the department offered an eight weeks' program of professional instruction in the field of radio. Five major and two minor courses made up the schedule: radio writing; radio production; radio acting; radio announcing; broadcasting in the United States; control-room operation; radio news writing and editing.

Professional men from the NBC staff, who had the main responsibility for teaching the courses, were Samuel Dickson, Floyd Farr, John Grover, Leon Hall, Earl Lee, and Don Martin. They were assisted by the following members of the Stanford faculty: Harlen Adams, Virgil Anderson, Inez Richardson, David Sievers, F. Cowles Strickland, and James Walters. Instruction was divided between the radio studios in San Francisco and campus classrooms. Mondays, Wednesdays, and Fridays were spent in San Francisco, Tuesdays and Thursdays on the campus, with Saturdays reserved for library work or special assignments. Eighty-eight persons were registered as students of the Institute: 65 took three major courses; 15 took two major courses; 7 took one course; and one person registered late for half of the period only.

In addition to the talent and performance courses, a general survey course was offered, under the title "Broadcasting in the United States." This course was organized by Inez G. Richardson, secretary of the Stanford Radio Committee and co-director of the Radio Institute. Guest lecturers, thoroughly rounded in their special fields, came to Stanford to assist with this survey course. The following were visiting participants: Harold Bock, manager, press department, Western Division, NBC, Hollywood; Walter Boland, manager, Western Region, General Electric Company, San Francisco; Keith Collins, manager, Station KMJ, Fresno; George V. Denny, Jr., president, Leon Hall, Inc., New York City, originator of the Blue Network feature, "America's Town Meeting of the Air"; John W. Elwood, general manager, station KPO, San Francisco; Lewis Frost, assistant to the vice-president, Western Division, NBC, Hollywood; Walter Guild, Garfield & Guild Adver-

tising Agency, San Francisco; Wilt Gunzendorfer, general manager, Station KSRO, Santa Rosa; Don Hall, communications engineer, Station KPO, San Francisco; Mrs. Helen Rachford, of the radio division, Los Angeles County Schools, Professor Holland D. Roberts, and Cyril Wood—all from the Communications Workshop, School of Education, Stanford; Jack Richardson, Western Division manager, NBC recording division, Hollywood; Henry Schacht, director of agriculture, Station KPO, San Francisco; Donald Tatum, NBC legal counselor, with Lillick, Geary, McHose & Adams, Los Angeles; Ray C. Wakefield, commissioner, Federal Communications Commission, Washington, D.C. Throughout this course attention was focused upon the social importance of radio and the great responsibility of American broadcasters in these stern times.

In several of the performance courses records were made of students' voices and were played back for class analysis. Students were given the chance to suggest new program ideas and to have them discussed as might be done in a studio conference. The opportunity to direct short skits in class provided practice in the management of sound cues and the handling of casts in production. Students prepared continuity for sustainer, or company-time, musical shows and helped to produce them. Arrangements were made for small groups to observe rehearsals of studio shows from control rooms and sponsors' booths, and the students who wished to work through a full day with an announcer-producer were permitted to do so.

Four "showcase" performances gave opportunity for application of the techniques learned in the classes. Mr. Elwood cleared KPO air time on three Saturdays, July 31, August 7 and 14, at 9:15 P.M., for Institute productions, and a special period was allocated on August 14 at 3:30 P.M. for Pacific Network presentation of the closing dramatic show. The first "showcase" performance of the production class in action was given over Station KPO on Saturday evening, July 31. The script for this broadcast was written by John Grover but the show was entirely student acted and produced. Members of the announcing class prepared skits which were worked into a script by David Sievers for the second Saturday evening air show which demonstrated the work of the announcing and acting classes. The final performances were first-rate demonstrations of radio drama well written, well acted, and well produced. The script, entitled simply "Woman and Child," was written by Norman Kramer, one of the younger students in the writing class. The program was given twice with cast changes for each. Students from the acting, announcing, and production classes handled all assignments under the guidance of Samuel Dickson. Both performances were aired from Studio A in Radio City to permit audience attendance. As a part of the afternoon show, announcement was made of the scholarship award of merit to Miss Joanne MacFadyen of San Francisco. Immediately following this performance, certificates for satisfactory completion of work were presented by John W. Elwood to the students in the Institute.

"America's Town Meeting of the Air," the outstanding radio forum on public affairs which has been regularly available to listeners since 1935, was broadcast from Memorial Hall on Thursday, July 8, as one of the summer's featured radio events. More than 1,650 people were in the Stanford audi-

ence. George V. Denny, Jr., originator of the program idea, directed the broadcast and opened the program with this greeting to listeners throughout the nation: "Good evening, neighbors. This is your moderator, George Denny, inviting you to join us in sunny California where we're the guests of Stanford University and reaching you through the facilities of the Blue Network Station KGO in San Francisco. We are meeting here in Memorial Hall, the home of the University's department of speech and drama, one of the most completely equipped university theaters in America. As a former teacher of dramatic production, it makes me both envious and happy for my old friend and classmate, Hubert Heffner, the head of this department, who is now on leave with our Armed Forces. I know that he and several million other Americans will be listening to our discussion this evening with deep concern and interest, for it involves one of our biggest international dilemmas Our question tonight is, 'Must Western Supremacy Be Restored in East Asia after the War?' Dr. Harold H. Fisher, professor of history at Stanford, and Mrs. Kathleen Norris, famed American author, say that it must. Mr. Owen Lattimore, one of America's leading authorities on the Far East and head of the Page School of International Relations at Johns Hopkins, and Major General Paul B. Malone, United States Army, retired, and Blue Network commentator, say it must not." Dean John W. Dodds of the School of Humanities acted as chairman for the preliminary meeting preceding the regular broadcast program. Mrs. Owen Lattimore, author and herself an expert on Far Eastern affairs, and John W. Masland of the Department of Political Science opened this discussion period with provocative items related to the main topic. During the regular broadcast a group of the younger faculty men and Palo Alto civic leaders served within the audience as assistant moderators to co-operate with Mr. Denny in the prompt handling of questions. The preliminary discussion accomplished the purpose of getting the audience into a question-asking frame of mind, and the result of the combined sessions was a thorough analysis of an international problem very close and very real to the people of the Pacific Coast. The department is grateful for the help of many different members of the University staff in handling program details. It is appreciative, too, of the privilege of co-operating with Mr. Denny in this vitally important program to extend knowledge of public affairs and to encourage wide discussion of controversial matters of public concern.

Radio Workshop.—In the autumn quarter the Radio Workshop was under the direction of Baxter Geeting of San Francisco. The Office of War Information requested a dramatization on the subject of gas rationing, which was written by David Sievers. The students of the Workshop acted and produced the program, which was transcribed for the OWI. The Workshop was handled in the winter quarter by Mr. Sievers. Its first project was the production of a series of transcriptions used as historical montages to bridge the intervals between the scenes of *In Time to Come*, a play based on the life of Woodrow Wilson. During the spring quarter several worth-while radio dramas written by the radio writing class were acted and produced by the Radio Workshop. They were broadcast over Station KQW on eight Saturday afternoons during April and May, giving the students invaluable practical experience in every phase of radio production. As the series proceeded,

the standards approached professional quality more and more, and considerable listener interest was manifested. A copy of each script is being placed in the drama library. In planning this series of programs we were fortunate in having the collaboration of Mr. Skipwith Athey of the Electrical Engineering Department.

Stanford Speakers' Service.—Despite the difficulties of transportation and the loss of many student and faculty speakers during the year, the Stanford Speakers' Service completed one of its most successful programs. The establishment of the Service as a reliable agency for Peninsula and community organizations was evidenced by the receipt of numerous letters expressing appreciation for the service extended. The roster of speeches is designed to meet the needs and interests of business, service and social groups, schools, churches, and campus organizations. During this past year there were many requests for all topics listed in the roster, all of which requests were filled. More than 150 speeches, dramatic readings, and literary programs were presented. Some organizations called upon the Service to supply their weekly or monthly programs throughout the entire academic year. Under the direction of faculty adviser Assistant Professor Claire MacGregor Loftus, 32 students representing 9 departments in the University received individual instruction and practical experience in presenting public programs. During the year 50 requests for faculty speakers were received. Not all of these could be filled because many faculty speakers registered with the Service were absent from the campus. The contribution of the Service to war defense agencies both on and off campus was a direct and pertinent one. All phases of operation were geared to meet the demands of a community at war.

Debate.—Associate Professor Chapin served as chairman of the Debate Council of the Associated Students and advised debaters until his departure for Navy service in February, at which time he was succeeded by Professor Emerson. James B. Kessler, senior debater, served as assistant adviser until he was called into military service early in April. Freshman and varsity debaters were combined into one squad of 17 students, 7 of whom had been called into military service by April 1. Two all-University debate and discussion programs were held, an interesting feature of each being a special panel of students representing various anti-Axis countries. The second of these programs was repeated at a session of the Stanford Alumni Conference in San Francisco. Delta Sigma Rho sponsored its usual intramural debate tournament. Many debates and panel discussions, some over Station KFRC, were held with colleges and universities of the Bay area. The San Quentin, Commonwealth Club, and Joffe debates were held as usual. Stanford speakers were sent to the Linfield College tournament, the Pacific Forensic League tournament, the Western Invitational Oratory contest, and the University of California at Los Angeles extempore tournament, the latter three events being held at the same time in Los Angeles to insure a minimum of travel. Stanford participated in the regional semifinal of the National American Economic Foundation Radio Prize debates, the San Francisco semifinal of the Jefferson Oratorical contest, the New York national final of the same contest, and in the Denver Western States semifinal of the National Speech and Discussion contest sponsored by the office of the Co-ordinator of Inter-American Affairs. Despite its small size, the debate squad was well-balanced,

five firsts and three seconds won in major individual competitions being accounted for by seven different members, with five others accounting for decisions in major debates. Mr. and Mrs. Albert Mellinkoff of Beverly Hills, on behalf of their three sons, Abe, David, and Sherman, outstanding former Stanford debaters, and their daughter, Ruth, who received her Stanford degree this year, established the Mellinkoff Award to be presented annually to the student doing the best extemporaneous speaking of the year. Charles E. Allen was the first to receive the award. James B. Kessler was voted the Ronald Kay Memorial Award as the outstanding debater of the year, and James R. Frolik was voted the Ray Lyman Wilbur Award for the debater contributing the most to Stanford University.

Drama library.—Ram's Head and Dramatic Council, student organizations devoted to dramatic work, gave \$1,500 from the income of student shows to aid in the further development of an outstanding drama library at Stanford, particularly in the field of American drama and music drama. One hundred dollars of this sum was set aside as a special library fund to be used for cataloguing this material to make it more readily available for student use.

Faculty activities.—On Sunday, February 7, in the Fairmont Hotel in San Francisco, a group of students and faculty members under the direction of Dr. Popper presented a radio dramatization, "When in the Course of Human Events," before the eleventh annual conference sponsored by the Stanford Alumni Association.

On May 16 at the Palace Hotel in San Francisco the department prepared and presented under the direction of Professors Heffner, Strickland, and Popper a program participated in by students, faculty, and alumni at the dinner honoring President-Elect Tresidder and Chancellor Wilbur.

Professor Heffner spoke before the third annual radio conference held at the Hotel Sir Francis Drake in San Francisco on October 26 on the subject, "Utilization of Radio by Educators." He presented a paper, "Conditions in the Contemporary American Theater," before the Faculty Research Club of Stanford University on March 3. He continued as general editor of the drama handbook series for F. S. Crofts & Co., as well as serving as associate editor of *The High School Thespian*, and on the editorial board of *Theatre Annual*. He was active in planning and executing the program of the first annual conference of the School of Humanities, and served as chairman of the fifth session of that conference. He continued as a member of the executive committee of the School. He was also active in Stanford Associates, having participated in several meetings devoted to University Services and other related activities, both on the campus and elsewhere. He was a member of the committee that planned the eleventh annual conference of the Stanford Alumni Association and served as moderator of the round-table discussion on the subject, "What Are We Fighting For?" He was instrumental in securing the Stanford University broadcast of America's Town Meeting of the Air, which was held in Memorial Hall on July 8; and in planning the first NBC-Stanford Radio Institute, held during the summer quarter. He served as chairman of the radio section of the Commonwealth Club from January to May and continued as chairman of the Committee on Publications of the American Educational Theatre Association. He was a member of various committees, some of which were connected with Stanford, such as

"Know Stanford," Public Exercises, and General Education; and some of which were related to other professional activities, including the Committee on Bibliography of the National Association of Teachers of Speech and the Committee on Playwriting and Production of New Plays of the American Educational Theatre Association. In May Professor Heffner entered the Army with the rank of captain and was sent to the Army's School of Military Government at the University of Virginia.

Associate Professor Buckingham was on sabbatical leave for the academic year 1942-43.

Associate Professor Chapin, in addition to serving as chairman of the Debate Council and director of debating activities, until February, participated in the round-table discussion on the subject, "America Faces the Pacific," on the program of the eleventh annual conference of the Stanford Alumni Association. He also spoke before the Saratoga Men's Club in January on the subject, "A Close-up of War in Two Hemispheres." He was instrumental in inaugurating the all-University combined panel and debate in which students representing foreign nations were members of the panel. He was a member of the School of Humanities Committee on Symposiums. In February Professor Chapin entered the Navy with the rank of lieutenant (senior grade) and was sent to the Navy's School in Colonial Government at Dartmouth College and Columbia University.

Associate Professor Emerson continued on a half-time basis in the autumn quarter and on a full-time basis in the winter, spring, and summer quarters. He assisted in Lower Division advising, was a member of the School of Humanities Committee on Symposiums, and co-operated with the English Department in arranging a course of study of English and public speaking for the Army Specialized Training Unit. He served as judge in various inter-collegiate, intramural, and regional service club speaking contests and tournaments, and as moderator of one collegiate forum broadcast over Station KFRC. Upon Dr. Chapin's departure in February, he took over the duties of debate director and served as chairman of the Debate Council of the Associated Students. He reviewed a standard public-speaking test for the January number of *Western Speech*. He is continuing his work of gathering material for a casebook in argumentation.

Associate Professor Anderson continued as director of the Speech Clinic. He served as chairman of the Committee on the Special Credential in Speech Correction and the Committee on Course Scheduling for the School of Humanities. He also continued to serve as critic and counselor of the Palo Alto Toastmistress Club and became critic and counselor for the Redwood City Toastmasters Club. He continued as associate editor for *Speech Monographs* and as a member of the Committee on Research of the National Association of Teachers of Speech. His book, *Training the Speaking Voice*, published in August 1942 by the Oxford University Press, was chosen by the American Institute of Graphic Arts as one of the "Sixty Textbooks" of the year. During the spring quarter he was a member of the faculty cast of *Charley's Aunt*, which toured the Army and Navy camps of the Bay area and vicinity, and which constituted the final offering of the 1942-43 season of the Stanford Players at Stanford. He participated in the Language Arts Institute conducted by the Stanford School of Education, serving as a discussion leader

in one session and speaking as a member of a panel in another session on the subject, "The Teacher's Speech." Upon the departure of Professor Heffner in May, he was appointed acting head of the department.

Assistant Professor Winbigler continued his work with the School of Education, served as co-ordinator for the Committee on Exceptional Students, and co-operated during the summer quarter with the communications center in the secondary education workshop. He continued his work on two state curriculum planning committees and made a number of field trips to schools and communities throughout California in the interests of speech education and the work of the Committee on Exceptional Students. He served as faculty co-ordinator with the alumni conference committee in planning the eleventh annual Stanford Alumni Conference. He also participated in the Language Arts Institute conducted by the Stanford School of Education, speaking on a panel discussion devoted to the subject of development of speech abilities of the child. This year Dr. Winbigler devoted two-thirds of his academic time as assistant registrar.

Assistant Professor Loftus continued to serve as faculty adviser of the Stanford Speakers Service. She also served as chairman of the Red Cross Speakers Bureau, Palo Alto Chapter. During the year she presented five literary programs in the form of lecture recitals before women's clubs on the Peninsula.

Acting Assistant Professor Adams, on the staff for the summer from Chico State College, served as speech consultant in the communications workshop of the School of Education. He was also on the staff of the Radio Institute, assisting in the radio announcing course. He participated in the Language Arts Institute conducted by the School of Education, speaking on two of the sessions. He played a leading role in one of the Noel Coward one-act plays, *Family Album*, a summer quarter offering of the Stanford Players.

Director of Dramatics Strickland served in an advisory capacity with the Committee on Commencement and was a member of the "Know Stanford" Committee. With Dr. Popper he prepared the program for the dinner in honor of President-Elect Donald Tresidder, held at the Palace Hotel in San Francisco on May 16. Upon the departure of Professor Heffner, he served as co-director, with Mrs. Inez Richardson, of the NBC-Stanford Summer Radio Institute. He was also in charge of arrangements for the presentation of "America's Town Meeting of the Air," a national radio broadcast from Stanford July 8 over the Blue Network. He published an article on educational theater in *The Players Magazine*.

Associate Director of Dramatics Vance has been on leave of absence during the year with the Armed Forces. He now has the rank of second lieutenant in the Special Service Division.

Assistant Director of Dramatics Sievers directed and acted in a production of *Charley's Aunt*, the all-faculty show which toured the Army and Navy camps on the Peninsula and vicinity. He prepared his own acting version of the Kataev play, *Squaring the Circle*, a summer production of the Stanford Players, which was subsequently toured to one Army and one Navy post. He also acted in Noel Coward's *Tonight at 8:30* during the summer. He wrote two radio plays for the Office of War Information and during the autumn quarter directed two play readings, *Oedipus Rex* and

The Chalk Circle. As a part of the Radio Workshop activities he produced and directed during the spring quarter a series of eight weekly radio plays under the title, "Stanford Has a Story for You." These were broadcast over Station KQW. Students in the production classes wrote the plays and acted them. He served as an instructor in radio acting in the NBC-Stanford Radio Institute and during the year pursued graduate work toward his Master's degree.

Assistant Professor Popper, director of Opera Workshop, who is a member of the staff of the Division of Music, also assisted in the Department of Speech and Drama. The Opera Workshop scored one of its outstanding successes on March 4-6 with performances of *The Gondoliers* by Gilbert and Sullivan, one of the winter quarter offerings of the Stanford Players. Orchestra, chorus, and soloists were under the direction of Dr. Popper, and the opera was staged by Director of Dramatics Strickland. On Thursday evening, July 29, Carlo Menotti's radio opera, *The Old Maid and the Thief*, was presented in the Little Theater under Dr. Popper's direction for the Radio Institute, the Friends of Music, and interested students.

Technical Director of Dramatics Waldemar Johansen has been on leave of absence with the Armed Forces during this year. He is serving as Director of Training Aids in the Pilot School at the Santa Ana Army Air Base at Santa Ana, California.

Associate Technical Director of Dramatics Sollers joined the staff in the winter quarter and served throughout the spring and summer. In addition to his duties in the technical field of drama, he directed three one-act plays from Noel Coward's *Tonight at 8:30*, a Stanford Players summer quarter production, in which he demonstrated the technique of center-staging for the first time at Stanford. He also directed a moving picture short for Guide Dogs for the Blind, Inc., at their training farm at Los Gatos, using speech and drama people and blind students. This film was made to illustrate the work being done in rehabilitating the blind and will be shown at service clubs throughout the country and before charitable institutions of various kinds.

Assistant Technical Director of Dramatics Girvan was awarded a National Theater Conference fellowship for the year. He completed the work for his Bachelor of Arts degree in the winter quarter.

Assistant Technical Director of Dramatics Lievsay presented an illustrated lecture before the Stanford Dames in November on the history of costume. She costumed the dance program offered by the Orchesis of Stanford in the spring quarter.

Instructor Brain talked before the Tamalpais Women's Country Club of Ross, California, in May on the subject of "Costuming and Clothes, Simulations and Short Cuts in Wartime Russia, England, and America." She accepted the invitation of Elizabeth M. Braly of Pasadena to evaluate her wardrobe, with the result that Miss Braly is generously donating to the costume department a dozen or more valuable and highly prized gowns and six or eight hats and many costume accessories, most of them purchased in Paris and Florence in the late nineties and the early nineteen hundreds. During February and March she attended a series of lectures on costume design at the San Francisco Museum of Fine Arts given by the designer of

Katherine Dunham's costumes and décor. During the year Miss Brain reorganized the costume and makeup courses with a view to the development of maximum learning values for the student and of production efficiency in the costuming of the shows.

Lecturer Robertson continued her directorship of the Palo Alto Community Children's Theater. She gave numerous lectures and lecture demonstrations on the general subject of children's literature and children's dramatics, child guidance, and child psychology for various parent-teacher associations and women's clubs in the Bay area, and for teachers groups of San Francisco and San Jose State College. In February she participated in a panel discussion on "Guidance of the Adolescent during World War II" at Mills College, and in March she was the guest of the San Jose Chapter of the League of American Penwomen, speaking on the subject, "Writing for Children." She appeared on the program of the Language Arts Institute conducted by the Stanford School of Education in August, speaking on a panel devoted to the subject, "Developing Speech Abilities of the Child." In November Stanford students registered in her course in Children's Theater produced *Amanda* at the Palo Alto Community Children's Theater. In December this production was taken to San Francisco, where it was presented under the sponsorship of the San Francisco Children's Theater Association. In June she completed a three-year term of service as a member of the American Educational Theater Association's play revision committee by submitting a detailed report on "Play Revision for Secondary Schools."

Lecturer Welles was not on active duty this year. However, he continued his directorship of the Palo Alto Community Players. He contributed extensively to the problem of furnishing entertainment to the Armed Forces, serving as California chairman of the American Communal Theater, as northern California chairman of the National Theater Conference, as a member of the National Advisory Board of the American Theater for Victory, and as director of the Palo Alto Community Theater camp show fund and Peninsula camp theaters construction project.

Instructor McKelvey spent the year on leave, attending the University of Wisconsin, where he was awarded a nonresident graduate scholarship, and where he received his Doctor's degree in February. While at the University he was elected to membership in Phi Delta Kappa, honorary professional fraternity. He attended the annual convention of the National Association of Teachers of Speech in Chicago, and served as judge for many speaking, debating, and reading contests held on the University of Wisconsin campus and elsewhere. He joined the staff of the University of Illinois for the second semester to work on a special project connected with the Reserve Officers Training Program established on that campus. The assignment involved a survey of oral skills of 700 advanced cadets and of giving remedial training to 125 speech-defective cadets. During the year he visited six of the larger universities throughout the country for the purpose of gathering information concerning their speech programs for war trainees. A monograph summarizing his research in the field of public-opinion testing as related to the improvement of college teaching conducted at the University of Wisconsin has been accepted for publication in the current issue of *Speech Monographs*. He returned to active duty at Stanford during the summer quarter.

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Professor Lockhart also has been on leave. Until July he was Regional Rent Attorney for the Office of Price Administration. In that month he resigned to become a lieutenant in the United States Navy.

Professor Kirkwood has continued to serve as a member of the University Patent Committee, as a member of the Board of Directors of the San Francisco Legal Aid Society, Board of Directors of the Legal Aid Society of Alameda County, Law School Editorial Board of the Foundation Press of Chicago, as a member of the Committee on Co-operation of the State Bar of California, and as a member of the Committee on Bar Admissions of the Association of American Law Schools. In November he was appointed expert examiner (law) for the United States Civil Service Commission. In the same month he was appointed a member of the Tenth Regional Advisory Council to the National War Labor Board. When the Tenth Regional War Labor Board was established in February, he became a public member and has served part time since his appointment.

In view of the fact that five members of the staff were on leave it became necessary to make numerous adjustments in the curriculum. A few courses were dropped. Most of the faculty remaining on duty assumed extra work. We also added to the staff as acting associate professor, Mr. Sam D. Thurman, Jr., of the Salt Lake City Bar. Mr. Thurman took his LL.B. at Stanford in 1939 and has had three years of experience in practice since that date. He has taught Constitutional Law, Evidence, and Taxation this year.

The following persons have generously contributed books to the Law Library: Mrs. Grace Spencer Hall, Mrs. Bernard McManus, Mrs. Percy A. Martin, Professor Luis Munoz Morales, Mr. Charles E. Shea, Mr. Lester D. Summerfield, Mr. Nathan van Patten, and Mr. Arthur T. Vanderbilt.

Seventy-four donors contributed a total of \$1,314 for the use of the Law School through the Stanford Fund.

In spite of the increased pressure of war times and the decreased attendance in the School, the following gentlemen have continued their valuable service in supplying supplementary lectures in the School: Charles A. Beardsley, Marsden S. Blois, Walter E. Bruns, Henry G. Hill, and Robert Littler. Our most sincere thanks goes to all of the foregoing persons for their interest and assistance in carrying on the work of the School.

Registration in the School has, of course, been very seriously affected. This has been true not only at Stanford but all over the country. In fact, we have a somewhat larger registration in point of percentage of the normal than have many schools. We closed the year with 30 students. It is essential that we continue to train those who are able to attend, as the demand for legal service is far beyond the present supply. For many months we have been unable to meet constant requests for recommendations of young lawyers. These requests came both from private law firms and from government offices. Fortunately there are indications that the registration of students has reached its minimum.

MARION RICE KIRKWOOD
*Professor of Law and Dean of
the School of Law*

SCHOOL OF MEDICINE

The registration in the School of Medicine for the year 1942-43 was as follows:

	First Year	Second Year	Third Year	Fourth Year	Fifth Year
Autumn quarter	62	60	60	59	61
Winter quarter	62	60	60	59	61
Spring quarter	..	60	60	60	118
Summer quarter	63	61	59	60	57

During the spring quarter there were no freshmen and because of the accelerated program we had an overlap of fifth-year students. The degree of Doctor of Medicine was awarded to sixty-one students on June 13, 1943.

It is with deep regret that I report the death of Dr. Eric Liljencrantz, assistant professor of medicine, assigned to radiology, on leave of absence for military service on November 5, 1942, at Pensacola, Florida; the death of Dr. Alfred Baker Spalding, professor of obstetrics and gynecology, emeritus, on November 27, 1942, in San Francisco; and the death of Dr. Julian Mast Wolfsohn, clinical professor of medicine, assigned to neuropsychiatry, on July 1, 1943, in San Francisco.

On September 1, 1942, Dr. Harold P. Hill became clinical professor of medicine, emeritus, and Dr. William E. Stevens became associate clinical professor of obstetrics and gynecology, emeritus.

Promotions on the School of Medicine faculty were as follows: John Field II, from associate professor to professor of physiology; Victor Hall, M.D., from associate professor to professor of physiology; Hubert Loring from assistant professor to associate professor of biochemistry; Grace Gunn, M.D., from assistant to clinical instructor in surgery (anesthesiology); Robert S. Irvine, M.D., from clinical instructor to assistant clinical professor of surgery (ophthalmology); Miriam Miller, M.D., from assistant to clinical instructor in surgery (ophthalmology); James Clifford Parrott, M.D., from assistant clinical professor to associate clinical professor of pediatrics; Ann Peril Purdy, M.D., from assistant clinical professor to associate clinical professor of pediatrics; Lowell A. Rantz, M.D., from instructor to assistant professor of medicine; Hale F. Shirley, M.D., from assistant professor to associate professor of pediatrics and psychiatry; Charles E. Smith, M.D., from associate professor to professor of public health and preventive medicine; Robert Wilson from research assistant to research associate in pharmacology.

The following new appointments to the faculty of the School of Medicine were made during the year: Jack Kenneth Afflerbaugh, M.D., clinical instructor in surgery; Ruth Garland Bowes, M.D., assistant in medicine; Henry Dean Brainerd, M.D., clinical instructor in pediatrics and medicine; Cecil Cooper Cutting, M.D., clinical instructor in surgery; Robert Dreisbach, M.D., assistant in pharmacology; Robert S. Evans, M.D., instructor in medicine; William A. Gorman, M.D., assistant in obstetrics and gynecology; Clara Hughes, M.D., assistant in medicine (tuberculosis); James B. Irwin, M.D., instructor in medicine (radiology); Albert J. Lubin, M.D., instructor in medicine (neuropsychiatry); Froilán P. Ludueña, M.D., assistant pro-

fessor of pharmacology; Margaret C. Malone, M.D., assistant in medicine; Roland D. Pinkham, M.D., instructor in surgery; Gaynelle Robertson, M.D., clinical instructor in surgery (ophthalmology); Otto E. L. Schmidt, M.D., clinical instructor in medicine (dermatology); Mary K. Schmeckebier, M.D., assistant in pediatrics; Ben Shenson, M.D., instructor in medicine; Frederic Shidler, M.D., instructor in surgery; William B. Wallace, M.D., clinical instructor in surgery; Robert P. Watkins, M.D., clinical instructor in surgery (bone and joint).

The following members of the faculty were called to active duty during 1942-43 and were granted indefinite leaves of absence: William G. Burkhard, M.D., assistant clinical professor of medicine (tuberculosis), Navy; William Sayre Cary, M.D., clinical instructor in obstetrics and gynecology, Navy; Garnett Cheney, M.D., associate clinical professor of medicine, Army; Lazarus John Courtright, M.D., clinical instructor in medicine, Army; Richard D. Cutter, M.D., clinical instructor in pediatrics, Army; Donald A. Dallas, M.D., assistant clinical professor of obstetrics and gynecology, Navy; Ernest Webber Denicke, M.D., assistant in surgery (ophthalmology), Army; Ludwig A. Emge, M.D., clinical professor of obstetrics and gynecology, Public Health Service; Charles C. Fahlen, M.D., clinical instructor in surgery, Army; Max Fine, M.D., clinical instructor in surgery (ophthalmology), Army; L. Henry Garland, M.D., assistant clinical professor of medicine (radiology), Navy;

Marlow B. Harrison, M.D., assistant in medicine (tuberculosis), Army; Richard Barr Jones, M.D., assistant clinical professor of medicine, Army; George S. Lachman, M.D., clinical instructor in surgery (ophthalmology), Navy; Edmund J. Mahon, M.D., assistant in medicine (tuberculosis), Navy; Edward Matzger, M.D., clinical instructor in medicine, Navy; George B. Miller, M.D., clinical instructor in medicine (tuberculosis), Army; John J. Miller, Jr., M.D., assistant professor of pediatrics, Navy; Ivan J. Miller, M.D., clinical instructor in medicine (radiology), Army; Henry W. Newman, M.D., assistant professor of medicine (neuropsychiatry), Navy; George Bernard Robson, M.D., clinical instructor in medicine, Army; Paul R. Rockwitz, D.D.S., assistant in medicine (dental clinic), Army; Robert A. Scarborough, M.D., assistant clinical professor of surgery, Navy; Frederic Shidler, M.D., instructor in surgery, Navy; Charles A. Shumate, M.D., clinical instructor in medicine (dermatology), Public Health Service; Herbert Gordon Smith, M.D., clinical instructor in surgery (ophthalmology), Navy; Bernard Strauss, M.D., assistant in surgery (genito-urinary), Army; Charles F. Sweigert, M.D., clinical instructor in medicine, Army; Robert P. Watkins, M.D., clinical instructor in surgery (bone and joint), Navy; Dwight L. Wilbur, M.D., associate clinical professor of medicine, Navy; Walter P. Work, M.D., assistant in surgery (otorhinolaryngology), Army.

At the close of the present academic year we have seventy-one members of our Medical School faculty above the rank of assistant in instruction on active military duty. This has placed a heavy burden of teaching and clinical service on the remaining members of the faculty. It is with pride that I report the cheerfulness and willingness evidenced by every member of our staff in continuing the routine activities of the Medical School with no significant impairment. I wish to thank every one for this splendid co-operation. In

addition to carrying on Medical School duties a goodly number of the remaining members of our faculty are engaged in medical war work of one kind or another. These activities include membership on committees of the National Research Council, on special committees on national scientific organizations, special committees of the various departments of the federal government, and several others serve as consultants in special fields to the War and Navy departments. Several members of the faculty are engaged in war research projects under the Office of Scientific Research and Development.

During the academic year 1942-43 loans from the Alumni Jordan Medical Loan Fund were made to Winston Benner, George Chapman, Charles Duisenberg, and William Albert Wilbur; the Carrie Hassler Scholarship to Michael Radakovich; the Switzer Scholarship to Kenneth Allen, William H. Clark, and Richard Halpern; the Kellogg Scholarship to John M. Bell, Thomas Elmendorf, Harold M. Hill, Garver Jensen, William F. Luttgens, David McKay, James W. Martin, Camile J. Pertuit, and Ralph W. Schaffarzick; the Newell Scholarship to Henry Shields Barr, Grover C. Carter, and Edmund L. Smith; the University Graduate Scholarship to Frank W. Norman, and Joseph M. Oyster; the Fries Scholarship to Francis J. Curry and Joseph M. Oyster; the Bookstore Scholarship to Paul G. Hattersley; the Bacon Scholarship to Kenneth Allen, Francis J. Curry, Frank W. Norman, and Joseph Oyster; the Agnes Walker Scholarship to Elizabeth Bradley and Janet Snelling; and an anonymous scholarship to Edward W. Cook, Thomas Elmendorf, and George Michelson. Thirty-six students received a total of \$9,128 from the Federal Student War Loan Fund, twenty-two students received a total of \$5,959 from the Kellogg Loan Fund, and thirty-four students received a total of \$5,225 from other Medical School loan funds during the year.

The Medical School expresses appreciation at this time for the additional gift of \$5,000 from the W. K. Kellogg Foundation for student aid during the accelerated Medical School program. This fund was divided into the Kellogg Scholarship Fund for Medical Students, \$1,600, and the Kellogg Loan Fund for Medical Students, \$3,400, and has been of tremendous help to our students who are partially self-supporting.

Mr. Philip R. A. May, a Rockefeller British Medical Student, completed his required work of the senior year during the winter quarter and made a very admirable academic record. He is now interning in medicine at Stanford University Hospital. At the beginning of the autumn quarter 1942 we accepted another Rockefeller British Medical Student, William A. Taylor from the University of Glasgow. He remained through the autumn, winter, and spring quarters but, with our approval, transferred to Cornell Medical College at the beginning of the summer quarter 1943.

Dr. Charles W. Barnett, medical director of the Student Health Service for the School of Medicine in San Francisco, reported a total of 819 visits from medical students during the year. Fifty-four students were hospitalized for a total of 200 days. There were no epidemics or other unusual illnesses among students. The Student Health Service was conducted at a net profit of \$362.38 for the year.

Because of the war it was decided not to appoint a Lane Medical Lecturer in 1943. It was agreed with the University of California, however, to appoint a Herzstein Medical Lecturer if a suitable candidate could be found.

The sixty-first series of Popular Medical Lectures was given as follows : April 2, "Food Rationing and Civilian Health," by Dr. J. C. Geiger ; April 16, "Tropical Diseases Menace United States at War," by Dr. Alfred C. Reed ; April 30, "Health Service to the Public during the Emergency," by Dr. L. R. Chandler ; May 14, "Protection of Health and Fitness in Flying Personnel," by Dr. John K. Lewis.

Medical students and faculty were privileged to hear the following visiting lecturers : Lieutenant Colonel Ashley Oughterson, on "The Pancreas" ; Postgraduate Staff Conference on War Medicine, with Dr. P. J. Halford and Dr. Edgar Poth as guest lecturers ; Dr. Robert A. Hingson and Dr. Waldo B. Edwards of the United States Public Health Service, on "Continuous Caudal Analgesia" ; Dr. John F. Fulton, professor of physiology, Yale University School of Medicine, on "Air Transportation of War Wounded" ; Dr. Howard Potter, professor of psychiatry, Long Island Medical College, on "Psychiatric Rehabilitation for the Merchant Marine" ; Major General James C. Magee, on "Military and Tropical Medicine."

Because of our reduced faculty and the accelerated schedule in the Medical School, it became necessary to discontinue the postgraduate refresher courses in medicine for the duration. This decision was made with considerable regret and it is our hope that the course can be resumed at an early date in the post-war period.

Owing to the war program the arrangement entered into in 1942 with the Santa Clara Hospital whereby one of the Medical School faculty attended staff rounds and staff meetings on alternate weeks at the Santa Clara Hospital has been discontinued for the duration.

At the request of the Surgeon General of the United States Army, Stanford Medical School gave three courses in Thoracic Surgery to Army officers assigned to us for this purpose. Each course was six weeks in length and instruction was given in anatomy, pathology, pharmacology, physiology, anesthesiology, and experimental and clinical surgery with special emphasis on injuries and infections of the chest. The government paid the University \$100 per student for this course. We operated the three courses at a slight loss. The third such course was completed on June 19, 1943. These courses have been discontinued by the Army.

Several changes in our schedule and in our registration dates have been made necessary by the initiation of the Army and Navy Specialized Training Programs for medical students. All regularly matriculated students in the School on July 1, 1943, who were members of the Army or Navy Reserve Corps were given the opportunity of going on active military duty and being assigned back to us to complete their medical training. For unavoidable reasons, the activation of the students took place over several weeks during the summer quarter and we ended the year with sixty-six students in the Army and eighty-one in the Navy. Each military service appointed a commandant and established headquarters for the Medical School unit and has all military jurisdiction over the trainees. Otherwise the students are per-

mitted to carry on their regular activities without significant change on the part of the Medical School, its faculty, or the students in so far as medical education is concerned. We adopted twelve-week quarters for three quarters per academic session but four quarters each calendar year. This entails a teaching program of forty-eight weeks and only four weeks per year for vacation. We also agreed to admit a new freshman class every nine months. Premedical students for the next entering class, in April 1944, were selected by our own faculty Committee on Admissions. After that date, 55 per cent of each entering class will be selected by the Army from qualified premedical trainees in the Army Specialized Training Program, 25 per cent will be selected by the Navy from their Navy College Training Program, and the remaining 20 per cent, or twelve students, will be selected by our Committee on Admissions from civilian premedical students ineligible for military service. There has been some confusion concerning the status of premedical students now in college and eligible for military service but at present deferred by their Selective Service Boards to continue their education as premedical students. This situation, however, will be clarified in the immediate future.

The military program at the Medical School, as outlined above, provides for payment by the government to the University of the usual tuition and laboratory fees ordinarily paid by students, and payment for a student health service to be provided by the University. The students, as privates in the Army or as apprentice seamen in the Navy, receive a subsistence and maintenance allowance, and books and instruments are paid for by the government. Medical students will be required to take an internship after completing the required accelerated curriculum but will be placed on an inactive military status without pay for the period of their internship.

During the past year the Medical School received gifts totaling \$146,435.43. These gifts were received from many individuals, several corporations, and from foundations. A complete list of gifts appears elsewhere in the *President's Report* but the sum of \$65,011.79 was specified for medical research, \$48,078.77 for free service in the Hospital, \$11,740.96 for scholarship and loan funds for medical students, and \$21,603.91 for the use of various departments in the Medical School, School of Nursing, and Hospital. The entire Medical School faculty expresses its gratitude for these many generous gifts.

During the year the *Medical Alumni Bulletin* was changed considerably in title, form, and content by agreement between the officers of the Medical Alumni Association and the Alumni Committee of the Medical School faculty. The new bulletin, entitled *Stanford Medical Bulletin*, is truly a publication concerned with the Medical School and its faculty, as well as the alumni of the Medical School. It has an editor and an editorial board and each issue contains several original articles by Stanford people. The new bulletin appeared in its present form in May 1942 and is being published quarterly. Thanks and appreciation are expressed to members of the editorial staff for their splendid work and for their co-operation with everyone in making this a Stanford Medical School family effort.

The influence of the war is reflected rather strikingly in our research activities. In addition to the research under the direction of the Office of

Scientific Research and Development, various members of our faculty continue their efforts in research and investigation. Problems requiring long-term studies which would be partially invalidated if the investigations were discontinued at this time are being continued by most departments. However, a good portion of our research in the Medical School has been stopped for the duration. This is due to the fact that many individuals responsible for the research are on leave of absence with the Armed Forces and the remaining staff members are unable to carry on the research as well as the teaching and service duties of those who are away for the duration.

Despite the exigencies of the present emergency all of us are interested and concerned with our postwar future. Informally we have discussed our needs and our deficiencies and at the June meeting of the Executive Committee the Dean was authorized to appoint a committee to co-operate with President Tresidder and the Dean in formulating future plans for the School. It is the ambition of all of us to make a maximum contribution to the war effort but at the same time prevent, if possible, any reduction in the quality of our work or the standards of medical education. Our teaching has been impaired slightly owing to overwork of the remaining faculty, but on the whole we can be proud of the splendid work throughout the Medical School.

I express my personal thanks and deep gratitude to every member of the faculty for the great work each is doing often at considerable personal sacrifice. It is such thoughtfulness and devotion to Stanford and Stanford principles that has made it possible to carry on under the present circumstances.

A detailed report of the activities of each department follows.

LOREN ROSCOE CHANDLER, *Dean*

ANATOMY

For a complete report of the Department of Anatomy, see under School of Biological Sciences, pages 161-65.

BACTERIOLOGY AND EXPERIMENTAL PATHOLOGY

For a complete report of the Department of Bacteriology and Experimental Pathology, see under School of Biological Sciences, pages 165-67.

MEDICINE

No departmental report can be submitted this year without stressing the impact of the war on the work. Many of our staff have entered the Armed Forces; generous response of the remaining men has made it possible so far to carry on the routine work essentially unimpaired. The teaching of medical students through four quarters in each year is an added burden, perhaps even

mitted to carry on their regular activities without significant change on the part of the Medical School, its faculty, or the students in so far as medical education is concerned. We adopted twelve-week quarters for three quarters per academic session but four quarters each calendar year. This entails a teaching program of forty-eight weeks and only four weeks per year for vacation. We also agreed to admit a new freshman class every nine months. Premedical students for the next entering class, in April 1944, were selected by our own faculty Committee on Admissions. After that date, 55 per cent of each entering class will be selected by the Army from qualified premedical trainees in the Army Specialized Training Program, 25 per cent will be selected by the Navy from their Navy College Training Program, and the remaining 20 per cent, or twelve students, will be selected by our Committee on Admissions from civilian premedical students ineligible for military service. There has been some confusion concerning the status of premedical students now in college and eligible for military service but at present deferred by their Selective Service Boards to continue their education as premedical students. This situation, however, will be clarified in the immediate future.

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We are very grateful for several financial gifts during the year. These have been applied to cancer research and to the Obstetrical Free Bed Fund. One of these was presented anonymously, while for the balance we are indebted to Miss A. Masson, Dr. E. B. Lederman, Mrs. P. Silverstein, Mr. and Mrs. Harold Grief, Mrs. Dewey Powell, and Dr. and Mrs. K. L. Schaupp.

The loss of two keepers from the animal rooms and a research secretary has necessarily forced a diminution in the amount of research work completed. Nevertheless, our rat and mouse colonies are being maintained and the studies on cancer and endocrine problems are being continued.

There was a slight increase in the attendance at the Women's Clinic, from 13,430 to 13,497. This may be accounted for by the increasing number of negro patients from the neighboring district, as well as the growth of our Prenatal Clinic.

There was a tremendous increase in both private and clinic obstetrics. Lane maternity service delivered 817 patients, an increase of 298, or 57.4 per cent. Of these, 466 delivered spontaneously, 340 were delivered operatively, and 31 by Caesarean section. There were three sets of twins. There was one maternal death, due to placenta ablatio. The fetal mortality remained about the same (4.4 per cent as compared with 4.6 per cent last year).

The Stanford maternity service delivered 633 patients, including nine sets of twins, or an increase of 56 per cent. There were 53 spontaneous, 519 operative, and 61 Caesarean section deliveries. There were no maternal deaths on this service, and the infant mortality decreased from 3.4 to 3.0 per cent.

A slight decrease in the Lane gynecologic service brought the admissions down to 367. There were 77 major operations, 114 minor, and 24 cystoscopies. Sixty-one (61) radium treatments were given to cancer patients. Ten women died on this service during the year, seven of whom had cancer, one uremia and pyelonephritis, one pelvic inflammatory disease, and one died from operative shock.

The department laboratory prepared and studied 1,229 pathologic and 569 research specimens. Two hundred twenty-six (226) tests for pregnancy were made, and 2,224 smears were examined for venereal disease.

The San Francisco Hospital maternity service decreased by 5.5 per cent, delivering 310 patients as against 328 for the previous year. There were no maternal deaths on this service. There were 247 spontaneous, 53 instrumental, and 10 abdominal deliveries. The infant mortality rate remained at 9 per cent.

The gynecologic service at the San Francisco Hospital dropped from 533 to 475 patients. There were 82 major operations, 154 minor, and 55 cystoscopies. There were 13 deaths, an incidence of 2.8 per cent. Cancer was the cause for 10, uremia 2, and chronic cystitis 1.

C. F. FLUHMAN

Associate Professor of Obstetrics and Gynecology

PATHOLOGY

The year began with a depleted department staff because of the loss of Dr. David Wood who had entered the Navy as a lieutenant commander, and Dr. Nathan Friedman who accepted the commission of lieutenant in the Army. Soon afterward, Dr. William Carnes was forced to take a leave of absence because of illness, and through the excellent co-operation of the Navy Department, Dr. Wood was temporarily detached from active duty and allowed to return to the Medical School faculty. It is expected that Dr. Wood will return to active duty with the Navy in November 1943. On May 1, 1943, Dr. Gert L. Laqueur was added to the departmental staff as instructor in pathology. Dr. Laqueur received the M.D. degree at the University of Freiburg, Germany, in 1937. He has been engaged in research in the Department of Obstetrics and Gynecology since 1938, and had the rank of instructor in that department.

During the year the usual arrangement was continued with the Department of Radiology whereby each of the three assistant residents in radiology spent four months in the pathology laboratory. However, the Department of Surgery did not send an assistant resident as it had theretofore, and the position of assistant resident in pathology was not filled in order to make available the maximum number of men for the Armed Forces. The resultant increase in routine work for those remaining members of the department was partially compensated by a decrease in the number of autopsies and surgical specimens as compared with the previous year.

A significant change was made in the departmental laboratory at the San Francisco Hospital when it was moved from the two crowded rooms adjacent to the medical amphitheater into conveniently located quarters in the building which houses the autopsy rooms and the laboratories of the San Francisco city chemists. This change has increased the working space substantially and will permit more individual work by students as well as investigative work when the present emergency has passed.

The teaching program was not altered except for continuation of teaching throughout the four quarters in conformity with the accelerated program of the Medical School.

No papers were presented at any medical society meetings during the year. Dr. McNaught attended the meetings of the American Society of Clinical Pathologists where he served as a member of the Board of Registry of Medical Technologists. He has also continued as a member of the technical committee of the Irwin Blood Bank of San Francisco.

Before he became ill, Dr. Carnes was continuing experimental studies of factors which govern parathyroid gland activity, and these will be resumed on his return. Dr. Cox has continued experiments on the effects of environmental factors on the function and structure of the stomach, and studied tissue changes in several groups of animals which had been used to test the chronic toxicity of various chemical compounds by the United States Department of Agriculture Laboratory in the Department of Pharmacology. Dr. Laqueur has completed work on studies which he had in progress in the Department of Obstetrics and Gynecology, and he has begun some observations of the hormonal content of the pituitary gland. Dr. Wood has reported

some interesting tumors of the stomach and an unusual appearance of cancer in many members of a carefully documented family. He is now studying an instance of remarkable non-neoplastic proliferation of epithelium in the human lung similar to that characterizing jagsiekte, a virus disease of sheep.

ALVIN J. COX
Professor of Pathology

PEDIATRICS

During the year the teaching staff has been reduced by the absence or leave for military duty of Dr. John J. Miller, Jr., assistant professor of pediatrics, now lieutenant commander, United States Naval Reserve; Dr. Joseph H. Davis, instructor in pediatrics, now first lieutenant, Army; and Dr. Richard D. Cutter, instructor in pediatrics, now captain, Army. Instruction has been continued under the accelerated program without additions of full- or half-time personnel to the staff. Dr. Brainerd has taken over the course in communicable disease formerly given by Dr. Miller, and Dr. Leach has filled in at the San Francisco Hospital for Dr. Miller and at Stanford Children's Clinic for Dr. Davis.

During the year Dr. Miller and his associates published papers on "A Comparison of the Nasopharyngeal Swab and the Cough Plate in the Diagnosis of Whooping Cough and Hemophilus Pertussis Carriers" and on "The Agglutination Reaction for Hemophilus Pertussis." Dr. Alvin H. Jacobs published a paper on "Enterobiasis in Children." From the research project supported by the National Foundation for Infantile Paralysis, Dr. Faber and Miss Silverberg published a note on the "Pathway of Invasion in the Cynomolgus Monkey after Oral Application of Poliomyelitis Virus." Dr. Faber and Dr. E. B. Towne had a report on "Early Operation in Premature Cranial Synostosis for the Prevention of Blindness and Other Sequelae."

In the Division of Child Psychiatry, which is partly supported by the Commonwealth Fund, Dr. Shirley and Dr. Layman are preparing a monograph on child psychiatry from the pediatric standpoint, and Dr. Preston has been studying some of the handicaps resulting from chronic invalidism in children. Dr. Purdy, after an absence of some months on war work, has resumed her study of children with heart disease. Dr. Faber and Miss Silverberg are continuing their studies of poliomyelitis, with special reference to the modes of infection, under the National Foundation for Infantile Paralysis.

The many generous gifts to our department and its work are listed elsewhere in this volume; for them we express our deepest gratitude. The establishment of a new fund known as the E. B. Wilbur Children's Free Care Fund by Mr. Brayton Wilbur, for purposes somewhat broader than free-bed funds, is noted with appreciation. We wish to mention also the great usefulness of donations to the Special Gifts Fund from the Phelan Fund (through Dr. Louis Mendelsohn), Mr. Wilbur, and several others. This Special Gifts Fund is for purposes within the Department of Pediatrics which the executive may select; during the past year it has made possible some much-needed

physical improvements in the Children's Clinic and will in the near future permit the installation of ultraviolet air-sterilizing lamps in the nurseries and wards of the hospital for the prevention of cross infections. These are illustrative of the value of donations for purposes not specifically designated at the time they are given.

HAROLD K. FABER
Professor of Pediatrics

PHARMACOLOGY AND THERAPEUTICS

Staff.—Dr. W. Sherwood Lawrence, instructor, resigned in March to accept a position as associate pharmacologist in the Food and Drug Administration, Washington, D.C. After an absence of eight months in his native Argentina, Dr. F. P. Ludueña returned in June to be assistant professor. After a period of nearly twenty years of successful teaching and conspicuous activity in research, Dr. M. L. Tainter, professor, resigned in August to become director of research for the Winthrop Chemical Company, Rensselaer, New York. Miss Jean Fellows (A.B., Stanford) was appointed assistant in research for the academic year, and Dr. Robert Hastings Dreisbach (A.B., Stanford, and Ph.D. and M.D., University of Chicago), assistant in instruction part time for the summer quarter, 1943, and instructor for the academic year 1943-44.

The following collaborated in various researches: Dr. A. L. Bloomfield, professor of medicine, Drs. W. M. Meininger and M. M. Hartman, clinical instructors in medicine, and Messrs. W. H. Clark, H. B. Kirtland, and R. I. Gonzalez of the fourth-year class.

Teaching.—Three rather popular elective courses were canceled owing to the accelerated pace of required instruction and to inadequacy of qualified personnel. The pressure of the accelerated schedule, without surcease, is being increasingly felt by those remaining to carry on. There is a diminishing capacity to give on the part of the instructors and to receive on the part of the students. Materials for both teaching and research are increasingly difficult to obtain. Under these conditions, deterioration in standards of instruction and research appears inevitable. The physical quarters leave much to be desired, the lecture room ventilation is worse, and the skylight roofs are leakier, despite repeated requests to remedy these matters.

Dr. Cutting's new textbook, *A Manual of Clinical Therapeutics*, appeared in April and was so well received that four months later the publisher announced a second printing. By request of another publisher, Dr. Cutting completed a smaller book on the actions and uses of drugs for nurses.

Research.—Reports published during the current year are indicated in the "Publications of the Faculty," pages 503-505.

Manufacturers of sobisminol continued to give liberal supplies of the drug to the Stanford Clinic on Syphilis for extended clinical observations. Three strains of experimental syphilis, one of which is neurotropic, are maintained in this department for chemotherapeutic investigations.

The possible hazards in using "carbitol solvent" continued to be investigated in several directions by Dr. Hanzlik and associates. Dr. Lawrence

and Mr. Clark advanced the development of a quantitative method for recovering the monoethylether of diethylene glycol from body fluids. Dr. Ludueña and Miss Fellows improved and completed this method. Professor C. R. Noller of the Stanford Department of Chemistry gave valuable advice in developing the method. Studies of excretion were undertaken and those of dermal application, chronic intoxication in drinking and feeding experiments, acute toxicity, and organ changes were advanced. Dr. Meininger of the Stanford Skin Clinic continued clinical observations of carbitol and other glycols. These studies were supported by an anonymous donor.

Drs. Hanzlik and Cutting completed a survey of conditions affecting the anticonvulsant action of diphenylhydantoin sodium (dilantin) tested by electrical stimulation of the cerebral cortex and published a preliminary report. Vasoconstrictors (cerebral ischemia) increased anticonvulsant efficiency, while vasodilators decreased it. With Dr. Cutting, Dr. Hanzlik completed a study of sulfonamides and some powerful antiseptics and protoplasmic poisons on organic catalysts and submitted the results for publication; the sulfonamides were comparatively weak anticatalysts.

Drs. Tainter, Lawrence, and Ludueña, and Messrs. Kirtland and Gonzalez completed a lengthy investigation of the effects of various drugs on the cortical threshold for electrical convulsions and submitted the results for publication. The total results in the department, with this method, should permit a more accurate assessment of the value of central excitants and of anticonvulsants in nervous disorders. Drs. Tainter and Bloomfield determined the effects of vitamin B deprivation on the spontaneous running activity of rats and submitted the results for publication; the activity was increased. Dr. Tainter also completed a study of analeptic drugs on spontaneous running activity and submitted the results for publication. Dr. Tainter investigated methyl cellulose as a new colloid laxative and submitted the results for publication; pending information on possible objectionable systemic effects, this laxative appeared satisfactory. With Drs. Cameron, Whitsell, and Hartman, Dr. Tainter investigated the clinical actions of ethylnorsuprarenin. Dr. Tainter also determined the antiobesity effects of benzedrine and propadrine and submitted the results for publication. These researches were supported by grants from the American Medical Association, Stanford Medical Research Fund, and Geo. A. Breon, Inc.

At the College of Physicians and Surgeons, A School of Dentistry, Drs. Tainter and Sidney Epstein completed extensive fundamental and practical studies of the abrasiveness of dentifrices. Reports of results were submitted to various dental publications as follows: use of metal plates for testing abrasiveness; the glass slide procedure for detecting undue abrasion of dentifrices; abrasiveness of dentifrices; abrasion of teeth by commercial dentifrices; relationship of particle size and other properties of dentifrice ingredients to toothbrush abrasion. These researches were supported by grants from the American College of Dentists and the California State Dental Association.

Dr. Cutting continued chemotherapeutic researches in experimental

tuberculosis and a virus infection. Thus far, tests have been made with about 150 dyes on cultures of tubercle bacillus, and a soluble sulfonamide derivative is being tried in infected animals. Dr. Cutting also investigated the value of sulfonamides against bacterial toxins in animals. A colony of hamsters was started for tests of virucidal agents. These researches were supported by the Stanford Medical Research Fund.

Pharmacological Investigations, Bureau of Agricultural and Industrial Chemistry, Agricultural Research Administration, United States Department of Agriculture.—This research group is now in its twelfth year. The staff consisted of Dr. Floyd DeEds, principal pharmacologist in charge; Dr. R. H. Wilson, pharmacologist; Dr. A. M. Ambrose, associate pharmacologist; Mrs. Jean S. Wilbur, assistant chemist; Mr. E. K. Doxtader, senior scientific aide; Mrs. Paulette Henderson and Miss Ellen J. Sandell, minor scientific aides; and Mrs. Mae R. Stubbs, secretary. Mrs. Sandell resigned August 14, 1943, to accept a position in the Marine Hospital at San Francisco. Published reports appear in the "Publications of the Faculty," pages 503-505.

The minimal concentration of 2-acetaminofluorene required in the daily diet of albino rats to demonstrate a carcinogenic action was determined. All other activities were concerned with the vitamin content of dehydrated vegetables, especially the vitamin A value as determined by bioassay on albino rats. The ever increasing demand for dehydrated vegetables to meet the requirements of Lend-Lease and the military forces, together with the need for preserving the vitamin content of dried vegetables, emphasized the importance of the bioassay work. Practically all the activity on dehydration investigations required of the unit were completed, and the researches were then directed to pharmacological problems on antibiotics, protein fibers, and blood plasma substitutes.

The unit co-operated with the Food and Drug Administration, Federal Security Agency, regarding the use of monochloroacetic acid in foods and beverages. During the year the unit was visited by various members of the Western Regional Research Laboratory, Albany, California; by Mr. Carl F. Speh, Assistant Chief of the Bureau of Agricultural and Industrial Chemistry, and by Dr. Glenn H. Joseph, Research Department, California Fruit Growers Exchange, Corona, California.

Miscellaneous.—Drs. Hanzlik and Tainter continued instruction in chemical warfare and other subjects of war medicine before various organizations in the San Francisco Bay region; lectures were also given periodically to Army thoracic surgeons. Dr. Hanzlik gave several courses of lectures on antimalarials to groups of Navy surgeons at the University of California, Berkeley. Dr. Tainter discussed abrasiveness of dentifrices before the San Francisco County Dental Society and the International Association of Dental Research in Chicago in April. He was editor of the *Stanford Medical Bulletin* during the year and consultant in chemical warfare to the San Francisco War Council, State Council on Defense, and the Office of Civilian Defense. Dr. Hanzlik acted in various advisory capacities for chemical warfare, etc., in San Mateo County. Dr. Hanzlik attended the annual meeting of the Council on Dental Therapeutics in Chicago in April and was re-elected vice-chairman,

and addressed the staff of the University of Tennessee Medical School in Memphis. Dr. Cutting addressed the Interurban Medical Club on sulfonamides as anticatalysts in inorganic systems and the Children's Hospital Seminar on actinomycosis. He was elected to succeed Dr. Tainter as editor of the *Stanford Medical Bulletin*. Drs. Cutting and Tainter assisted the federal Food and Drug Administration as experts regarding claims for various medicinal products. The majority of members of the department presented reports or attended meetings of the Society for Experimental Biology and Medicine, Pacific Coast Section. Dr. DeEds discussed "Dehydrated Food in War and Peace" before the San Francisco County Medical Society in November.

P. J. HANZLIK
Professor of Pharmacology

PHYSIOLOGY

For complete report of the Department of Physiology, see under School of Biological Sciences, pages 176-82.

PUBLIC HEALTH AND PREVENTIVE MEDICINE

Both the teaching staff and the teaching program have continued without substantial change. The only alteration has been to include approximately ten hours on military sanitation in the senior year and to increase the time allotted to industrial hygiene. This marks the second year of the four-quarter system and we are especially indebted to Dr. J. C. Geiger and his San Francisco Department of Public Health for the teaching time which they have uncomplainingly devoted to us. Again we have enjoyed the opportunity of taking the students to the facilities of the California State Department of Public Works, the East Bay Municipal Utility District, the Board of Public Works, and the Board of Park Commissioners of San Francisco. Practical experience was also provided our senior medical students by the Pan American Airways, Cutter Laboratories, Metropolitan Life Insurance Company, Pacific Telephone and Telegraph Company, W. P. Fuller Company, Bethlehem Steel Company, Moore Drydock Company, Paraffin Products Corporation, Borden's Dairy Delivery Company, and Swift and Company.

Close co-operation of the Medical Social Service and Out-Patient Department continued in our senior course of "The Patient in His Environment." To the following community leaders we are indebted for their participation in our case discussions: Dr. Edward Kupka, of the Bureau of Tuberculosis, and Dr. Martin Mills, of the Bureau of Crippled Children, both of the State Department of Public Health; Dr. R. S. French, of the California School for the Blind; Mr. J. M. Dodds, of the Bureau of Rehabilitation, State Department of Education; Miss Hesson, of the James D. Phelan Foundation; Miss Barbara Mayer, of the Vocational Service, United States Employment Service; Mr. Alex Sherriffs, of the Legal Aid Society; Miss Beryl Reinhart, of the San Francisco Department of Public

Welfare; Dr. R. W. Harbaugh, of the State Industrial Accident Commission; Miss Virginia Jameson, of the San Francisco Chapter of the American Red Cross; Miss Isabelle W. Gregory, of the Avery Fuller Children's Center; Miss Kinsey and Miss Bae, of the Children's Protective Society; Miss Eva Hance, of the San Francisco Community Chest; and Miss Catherine Moriarity, of the Children's Agency.

We are also very appreciative to Dr. M. K. Bennett and Dr. Joseph Davis of the Food Research Institute on the campus for leading our seminar on the world-wide problems of nutrition.

Research continued to center on coccidioidomycosis and specifically on its military aspects. These problems augment in importance. Our investigations are under the authority of and are supported by the Preventive Medicine Division of the Office of the Surgeon General, United States Army, through its Board for the Control of Influenza and other Epidemic Diseases.

Dr. W. P. Shepard continued his chairmanship of the Committee on Professional Education and membership on the Governing Council and Executive Committee of the American Public Health Association. He is now president of the California Tuberculosis Association and vice-president of the California Social Hygiene Association. He is public health representative for the Ninth Service Command Committee of Procurement and Assignment Service and member of the Co-ordinating Committee on Medical Care of Northern California Procurement and Assignment Service as well as adviser to the Chief of Emergency Medical Service of the San Francisco War Council. He serves on the Boards of Directors of the National Tuberculosis Association, the Western Association of Industrial Physicians and Surgeons, the California Heart Association, the Regional Board of the Western Branch of the American Public Health Association, as well as on some ten other national medical and public health committees and councils. At the seventy-fifth annual meeting of the American Public Health Association in St. Louis he served as chairman of the Resolutions Committee, presided at a meeting for State Merit System Executives, gave the opening address, "Educational Qualifications for Health Officers," to the Association's Ninth Institute on Public Health Education, and addressed a general luncheon session on "The Effect of War on the Professional Education of Public Health Personnel." He addressed several county medical societies and organized and presided at panel discussions on "Nutrition in Industry" for the Western Dairy Conference, on "Getting the Most out of Our Health Resources" at the California Conference for Social Work and on "Getting Special Public Health Jobs Done in Industry" at the Northern California Public Health Association meeting. He also addressed several Tuberculosis Association meetings and lectured on public health problems at the University of California both in Berkeley and Los Angeles.

Dr. J. C. Geiger made a number of talks before medical and lay groups including the California Association of Chamber of Commerce Managers, the Subcommittee on Housing of the Lanham Committee, and the United States Marine Corps Women Reserve. On September 1, 1942, he addressed the San Francisco County Medical Society on "Immunization." Other ad-

dresses include: "Venereal Disease and the War" before the Lion's Club (February 2, 1943); "Food Rationing and Civilian Health," a Lane Popular Medical Lecture (March 2, 1943). He gave three radio addresses: "Our Hidden Enemies" for Social Hygiene Day, "Pan America" for Pan American Day, "The City of St. Francis" for Inter-American Day. He also served as chairman and one of the principal speakers at the Inter-American Forum in June 1943 and as chairman of the Infantile Paralysis Committee.

Dr. Rodney R. Beard continued as flight surgeon for Pan American Airways and as consultant to the Secretary of War for Epidemic Diseases. He has been appointed deputy chief of Emergency Medical Services, San Francisco War Council, and special assistant to the State Director of Civilian Protection. He continues to serve as chairman of the Committee on Industrial Hygiene of the San Francisco County Medical Society, as a member of the Board of Directors of the Western Association of Industrial Physicians and Surgeons and of the San Francisco Housing and Planning Association. He is a member of Commission A, Committee on Aviation Medicine, National Research Council; of the Advisory Council, Bureau of Industrial Health of the California State Department of Public Health; of the Committee on Community Nursing of the Health Council, San Francisco War Chest.

He addressed the Alameda, Fresno, San Francisco, and San Joaquin County Medical Societies on "Chemical Warfare Agents," the Plant and Building Protection School of the San Francisco War Council on "Medical Preparations for Defense" and participated in several radio panel programs broadcast to South America.

He also attended the annual conference of the Medical Officers of Pan American Airways System in Miami, Florida, during November; the instructors' course on "Medical Aspects of Chemical Warfare" of the OCD, Region IX, in May 1943; and the Western Branch, Northern California Public Health Association meeting in June 1943.

Dr. C. E. Smith continued as consultant to the Secretary of War on Epidemic Diseases and on the Committee of Teaching of Preventive Medicine and Public Health of the Association of American Medical Colleges, was reappointed to the California State Board of Health, was appointed to the Chamber of Commerce Public Health Committee, and elected secretary-treasurer of the Northern California-Hawaiian Branch of the Society of American Bacteriologists. He addressed various county medical societies, the Bay Counties Veterinary Medical Association, and military hospital groups on public health and medical problems. He presided at one of the Western Branch, Northern California Public Health Association meetings. He gave two lectures on the Stanford University campus, one on "Public Health in Wartime" and one on "Coccidioidomycosis." He also participated in the Stanford Alumni Conference on February 7 in the panel discussion of "Medicine in the Postwar World." He attended the annual meeting of the California Medical Association.

CHARLES EDWARD SMITH
*Professor of Public Health and
Preventive Medicine*

SURGERY

The list of members of the surgical staff who have entered the Armed Forces during the year is presented in the report of the dean of the Medical School. Dr. John A. Bacher became clinical professor of surgery (otorhinolaryngology), emeritus, at the end of the year, but will continue on active duty as executive of the Division of Otorhinolaryngology. The teaching of surgery so far has not been curtailed. Every effort has been made not only to present the general principles of surgery, but to supplement the teaching of students and the house staff by lectures and demonstrations of surgery in modern warfare. Research problems that are of military value are being continued.

The male patients treated surgically on the General Surgical Service of Lane Hospital numbered 239, the female patients numbered 232, and children numbered 86, a total of 557. Three hundred and fifty-eight major operations and 112 minor operations were performed in Stanford Hospital.

The number of visits to the Surgical Clinic of the Lane Out-Patient Department was 11,188, of which 720 were made by new patients and 10,468 by old patients. There were 673 visits made by patients from the Unemployment Relief Division of San Francisco. Two hundred and thirty-three minor operations were performed in the Out-Patient Surgical Clinic. The attendance in special surgical clinics was as follows: general surgical, 7,815; proctological, 1,011; plastic, 107; fracture, 294; varicose vein, 772; and tumor, 1,189.

At the San Francisco Hospital, 1,244 male patients were admitted to the Stanford Surgical Service, of whom 752 were general surgical cases, 194 fracture, 54 orthopedic, 181 urological, 29 otorhinological, and 34 ophthalmological; there were 432 female patients admitted, of whom 276 were general surgical cases, 66 fracture, 30 orthopedic, 35 otorhinological, and 25 ophthalmological; there were 278 children admitted, of whom 128 were general surgical cases, 23 fracture, 2 orthopedic, 121 otorhinological, and 4 ophthalmological. There were 219 tuberculous patients admitted. In the operating room, 1,971 operations were performed, including 752 general surgical cases, 372 orthopedic cases, 95 urological cases, 158 otorhinological cases, 44 ophthalmological cases, 154 tuberculous cases, 74 tonsillectomies, 188 cystoscopic examinations, and 134 intravenous urograms. There were 1,497 citrated blood donations for the Blood Preservation Laboratory.

The number of visits to the Urologic Clinic was 3,954, of which 220 were made by new patients and 3,734 by old patients. There were 36 patients referred to the clinic from the State Department of Public Health. One hundred and thirty-seven patients were admitted to Lane Hospital. There were 32 minor operations and 124 cystoscopic examinations performed in the Out-Patient Clinic, and 88 major operations, 31 minor operations, and 63 cystoscopic examinations performed in Stanford Hospital.

The number of visits to the Ophthalmologic Clinic was 7,844, of which 394 were made by new patients and 7,450 by old patients. One hundred and sixty-eight patients were admitted to Lane Hospital. Twenty-four minor operations were performed in the Out-Patient Clinic, and 148 operations were

performed in Stanford Hospital. One thousand, four hundred and forty refractions were performed. The operating room service for in-patients was in charge of Drs. Hans Barkan and Dohrmann Pischel, with other members of the staff occasionally in charge.

The number of visits to the Ear, Nose, and Throat Clinic was 8,397, of which 1,559 were made by new patients and 6,838 by old patients. Three hundred and fifty-six patients were admitted to Lane Hospital. Seven hundred and twenty-four operations were performed in the Out-Patient Clinic and 311 operations were performed in Stanford Hospital.

The number of visits to the Bone and Joint Clinic was 3,414, of which 348 were made by new patients and 3,066 by old patients. Two hundred and twenty-nine patients were admitted to Lane Hospital. Of the 74 children admitted to Lane Hospital, 56 were Crippled Children Service cases. One hundred and twenty-six major operations and 70 minor operations were performed in Stanford Hospital, and 101 casts were applied.

In the Division of Anesthesia, 2,109 anesthetics were administered to private patients by hospital anesthetists. Seven hundred and seventy anesthetics were administered to clinic patients by hospital anesthetists, and 1,429 by members of the house staff. One thousand, one hundred and forty-seven cases were used for instruction of students, interns, and graduates in medicine.

The publications of the surgical staff are listed under "Publications of the Faculty," pages 506-508. The following addresses were delivered by members of the department during the year:

Dr. Otto Barkan: "Gonioscopy. Analysis of the Anterior Chamber Angle," "Analysis and Treatment of Wide Angle Glaucoma," "Analysis and Treatment of Narrow Angle Glaucoma (Iris Block—Shallow Chamber)" and "Congenital Glaucoma. Diagnosis and Operative Treatment," before the Research Study Club of Los Angeles.

Dr. John Cline: "Gastric Resection for Peptic Ulcer," before the California Medical Association.

Dr. J. R. Dillon: "Perineal Prostatectomy," before the San Francisco County Medical Society.

Dr. Leo Eloesser: "Compound Fractures in Wartime and Military Surgery of the Chest," before staff meetings of Hammond General Hospital, Modesto; Letterman General Hospital, San Francisco; United States Naval Hospital, Mare Island; United States Naval Hospital, Treasure Island; and before the War Session of the American College of Surgeons, San Francisco. "Pathogenesis of Pulmonary Cavities," before staff meetings of the Tuberculosis Institutes at Cordoba, Argentina, and Huipulco, Mexico; the Hospital Bolivar, Caracas, Venezuela; and before the Phthisiological Society, Buenos Aires, Argentina.

Dr. Emile Holman: "Injuries to the Heart," before the Thirteenth Annual Postgraduate Symposium on Heart Disease of the San Francisco Heart Committee; "Chest Wounds in War," before the California Tuberculosis Association and California Trudeau Society; "Experiences with Chest Wounds from the Pacific Combat Area," before the War Sessions of the American College of Surgeons at Los Angeles and San Francisco; "Chang

ing Patterns in Medical Care," before the annual meeting of the Stanford University Chapter of Phi Beta Kappa.

Dr. Nelson Howard: "Problems in Industrial Surgery," before the Institutes on Wartime Industrial Health in Crockett, Oakland, and San Francisco.

Dr. D. E. King: "Transiliac Amputation," before the American Academy of Orthopedic Surgeons, Chicago.

Dr. Sanford Moose: "Emergency Treatment of Maxillo-Facial Injuries," before the San Diego District Dental Society, the San Joaquin County Dental Society, the Santa Clara County Dental Society, the Sonoma County Dental Society, the Sacramento County Dental Society, and the San Francisco County Dental Society; "Oral Surgery Technique and Treatment of Maxillo-Facial Injuries," before the Arizona State Dental Society, the Los Angeles County Dental Society, the Oregon State Dental Society, and the Humboldt District Dental Society; "Maxillo-Facial Surgery," before the Army Medical and Dental Corps officers, Fort Ord, California, the Navy Medical and Dental Corps officers at Treasure Island Naval Hospital and at Alameda Air Base, and the Army Medical and Dental Corps officers and the staff at Walter Reed Hospital, Washington, D.C.

Dr. E. J. Morrissey: "Traumatic Injuries of Peripheral Nerves," before the San Francisco County Medical Society.

Dr. W. B. Neff: "Emergency Treatment by Dentists in Event of Disaster," before the Stockton Dental Society; "Some Practical Aspects of the Problems in Resuscitation: Artificial Respiration," before the San Francisco County Medical Society.

Dr. James Ownby, Jr.: "Estrogen (Stilbestrol) Uses in Urology," before the California Medical Association.

Dr. A. G. Rawlins: "Chronic Epiphora of Allergic Origin," before the American Society of Ophthalmologic and Otolaryngologic Allergy.

Dr. F. L. Reichert: "Treatment of War Wounds," before the Postgraduate Staff Conference, Stanford Medical School; "War Wounds," before the William Watt Kerr Club, San Francisco.

Dr. Victor Richards: "Sulfonamide Therapy in Surgery," before the staff meeting of the Permanente Foundation Hospital, Oakland.

Dr. J. A. Stiles: "Some Practical Aspects of the Problems in Resuscitation: The Mechanical Means of Resuscitation," before the San Francisco County Medical Society.

F. L. REICHERT, M.D.
*Acting Executive
Department of Surgery*

STANFORD UNIVERSITY HOSPITALS

The following tables show the patients admitted, the patient days, and the out-patient visits:

LANE PATIENTS ADMITTED

	1940-41	1941-42	1942-43
Dermatology	19	7	12
Gynecology	122	56	51
Medicine	901	872	791
Neuropsychiatry	288	299	271
Obstetrics	487	580	885
Obstetrics—Infants	449	519	798
Ophthalmology	202	251	254
Orthopedics	266	288	274
Otolaryngology	538	550	526
Pediatrics	389	431	391
Surgery	685	697	593
Urology	159	171	162
Total patients admitted.....	4,505	4,721	5,008

STANFORD PATIENTS ADMITTED

	1940-41	1941-42	1942-43
Dermatology	42	53	44
Gynecology	704	801	839
Medicine	1,203	1,339	1,320
Neuropsychiatry	132	181	223
Obstetrics	338	450	709
Obstetrics—Infants	314	413	617
Ophthalmology	312	313	336
Orthopedics	166	224	185
Otolaryngology	458	430	490
Pediatrics	10	10	23
Surgery	1,183	1,117	888
Urology	297	265	321
Guest	10	6	—
Total patients admitted.....	5,169	5,602	5,995

LANE PATIENT DAYS

	1940-41	1941-42	1942-43
Dermatology	446	78	120
Gynecology	1,123	572	296
Medicine	9,438	10,260	10,302
Neuropsychiatry	4,610	5,174	5,515
Obstetrics	3,941	4,471	6,715
Obstetrics—Infants	3,727	4,122	5,588
Ophthalmology	1,627	2,219	1,966
Orthopedics	2,783	3,087	5,109
Otolaryngology	1,439	1,265	1,482
Pediatrics	4,484	5,216	4,580
Surgery	11,202	11,715	9,252
Urology	2,536	2,346	2,206
Total patient days.....	47,356	50,525	53,135

STANFORD PATIENT DAYS

	1940-41	1941-42	1942-43
Dermatology	309	392	432
Gynecology	7,086	7,572	7,932
Medicine	9,072	10,323	13,186
Neuropsychiatry	1,844	1,821	2,046
Obstetrics	3,839	4,669	5,952
Obstetrics—Infants	3,567	4,244	5,740
Ophthalmology	3,370	3,082	3,386
Orthopedics	2,190	2,669	3,187
Otolaryngology	1,400	1,163	1,389
Pediatrics	383	345	455
Surgery	14,955	15,673	13,138
Urology	3,574	3,051	3,109
Guest	103	73	
Total patient days.....	51,692	55,077	59,952

LANE HOSPITAL

	1940-41	1941-42	1942-43
Average patients per day.....	129.7	138.4	145.5
Patients died	105	156	148
Autopsies	71	91	74
Percentage of autopsies.....	74*	64*	50*
X-ray case visits.....	7,578	7,390	6,730
X-ray therapy visits.....	4,211	4,587	3,822
Basal metabolism examinations.....	800	749	595
Electrocardiograph examinations	2,301	2,058	1,188
Operations	1,809	1,848	1,733
Clinical laboratory examinations.....	13,276	12,128	9,549
Bacteriological reports submitted.....	7,714	7,969	7,433
Physical therapy patients treated.....	3,110	2,682	2,381

STANFORD HOSPITAL

	1940-41	1941-42	1942-43
Average patients per day.....	141.6	150.8	164.2
Patients died	119	115	147
Autopsies	40	43	41
Percentage of autopsies.....	35*	38*	27*
X-ray case visits.....	5,469	6,654	8,064
X-ray therapy visits.....	3,332	2,870	3,411
Physical therapy patients treated.....	4,247	4,344	5,021
Basal metabolism examinations.....	634	756	724
Electrocardiograph examinations	580	700	739
Operations	3,125	3,350	3,270
Clinical laboratory examinations.....	27,460	27,753	29,596

* Coroner's cases and stillbirths excluded in compiling percentage.

OUT-PATIENT SERVICE

	1940-41	1941-42	1942-43
Total number of visits.....	142,068	123,698	104,225
Average new visits per day.....	26.6	24.4	28.2
Average total visits per day.....	462.8	402.9	340

Two hundred eighty-seven more patients were admitted to Lane Hospital during the same period last year, and 393 more patients admitted to Stanford Hospital. There were 2,610 more patient days in Lane Hospital and 4,875 more patient days in Stanford Hospital than during the previous

year. The above represents a total increase in patient days for both hospitals in the amount of 7,485.

STANFORD UNIVERSITY HOSPITALS AND OUT-PATIENT DEPARTMENT

	1940-41	1941-42	1942-43 before Reserves
Deficit, Lane	\$98,184.97	\$84,520.96	\$ 61,139.76
Profits, Stanford	92,878.06	85,226.34	109,716.95
Net deficit, both hospitals.....	\$ 5,306.91	.....	.....
Net profit, both hospitals.....	.....	\$ 705.38	\$ 48,577.19
Deficit, Out-Patient Department.....	17,162.83	18,571.64	19,154.23
Total deficit, hospitals and clinic....	\$22,469.74	\$17,866.26	.....
Total profit, hospitals and clinic.....	.....	.....	\$ 29,422.96

DEPARTMENT OF MEDICINE

Our main problems during the past year have been those connected with entry of staff members into military duty. This has resulted in a shortage of physicians in certain of the out-patient clinics which has made it difficult to keep up the normal standard of work. We hope, however, that it will be possible to continue the operation of all the clinics.

No important changes in organization or physical plant were made during the past year. It is highly important that plans go forward for the contemplated improvements in the medical ward so that they can be initiated as soon as building again becomes possible. I wish to stress once more the need of a ward for communicable disease and a small unit for study of metabolic cases.

In spite of war difficulties considerable research work was done.

DEPARTMENT OF SURGERY

The various divisions of the surgical service report the following number of clinic visits:

	1940-41	1941-42	1942-43
General Surgical Clinic.....	15,338	14,767	11,188
Men's Clinic	10,630	6,145	3,954
Eye Clinic	11,528	9,438	7,844
Bone and Joint Clinic.....	4,669	4,444	3,414
Ear, Nose, and Throat Clinic.....	11,283	10,136	8,397

There were 4,255 anesthetics administered and 5,003 operations performed.

One of the greatest problems during the year has been to obtain the services of graduate nurses trained in operating-room technique. This particular division of nursing has contributed more nurses to the service than perhaps any other. During the year it was necessary to call for volunteers from the general staff section to obtain sufficient personnel to staff the operating rooms.

DEPARTMENT OF PEDIATRICS

During the year the Children's Clinic was rehabilitated by painting, installation of new linoleum and of soundproofing, and a certain amount of rearrangement of spaces. This was partly paid for by the Phelan Fund. While not affording us much more room than before, the changes have

tly improved the working conditions and appearance of the clinic. It is obvious, as it has been for many years, that the clinic space and facilities are totally inadequate to meet the load and that a completely new setup is the only satisfactory answer to the problem. We realize, of course, that we must await the end of the war and that the difficulty affects all the departments in varying degrees. I take this occasion, however, to state again, as we have so many times before, that our outstanding need is for a new outpatient building or buildings in which the requirements of good patient care and good teaching will be met.

Gradually funds for free care of children in- and out-patients are increasing. Mrs. Faber's endowment fund is nearly \$9,000. During the year Dr. Brayton Wilbur started a new fund for free care, in memory of his father, Mr. E. P. Wilbur. Mr. Mills and Mrs. Haslett have continued their annual gifts. To these and other donors I wish to express the gratitude of the department for their interest and generosity, which are making it possible for us to give more and better care to the sick children who are brought to us. Gifts to the Special Fund for unspecified purposes have made it possible for us to order the ultraviolet air-sterilizing lamps mentioned as desirable in last year's report, and it is expected that they will be installed in the near future. They should materially lessen the dangers of cross-infection in our wards and nurseries in the hospital.

DEPARTMENT OF OBSTETRICS AND GYNECOLOGY

The following table gives a statistical picture of the activities of the Department of Obstetrics and Gynecology:

	1940-41	1941-42	1942-43
Home deliveries	43	11	0
Lane Hospital deliveries.....	445	519	817
Stanford Hospital deliveries.....	319	406	633
Patients admitted to Gynecological Ward	381	374	369
Pathological specimens studied.....	2,809	2,888	1,798
Pregnancy tests	214	299	226
Smears examined.....	2,246	1,758	2,224

The above figures indicate that there continues to be a marked increase in the number of deliveries in the department. The new lying-in suite, which was opened on January 31, 1942, has been a real source of pleasure to the patients during the past year and without these modern facilities, the increase in the birth rate would have resulted in many problems.

DEPARTMENT OF RADIOLOGY

The following statistical report gives a picture of the activities in this department:

	DIVISION OF DIAGNOSIS		
	1940-41	1941-42	1942-43
Private out-patient case visits.....	3,089	3,858	5,274
Stanford Hospital case visits.....	2,380	2,796	2,790
Clinic out-patient case visits.....	4,611	4,524	3,998
Lane Hospital case visits.....	2,967	2,866	2,732
Total case visits	13,047	14,044	14,794
Total radiographs	47,330	53,018	52,006
Total fluoroscopic examinations.....	7,248	7,129	7,316

DEPARTMENTAL REPORTS

DIVISION OF THERAPY

	1940-41	1941-42	1942-43
Private out-patient visits.....	2,445	2,242	2,634
Stanford Hospital visits.....	887	638	777
Clinic out-patient visits	3,801	3,942	3,002
Lane Hospital visits	410	645	820
Total visits	7,543	7,467	7,233

In the summer of 1943, X-ray films became scarce on account of war demands. A strong effort was made to economize and the rate of use was reduced from 3.5 films per case visit to 2.8, an estimated saving of 2,700 films in three months. This is not considered conducive to the best medicine, and now that films are available in needed amounts again, examinations are again being made more generously.

LABORATORY ACTIVITIES

In the Department of Pathology examinations were made on 785 surgical specimens from the clinic and 818 from the private service. The total number of clinic autopsies was 74, exclusive of 6 performed upon stillborn children and 41 private autopsies. This represents a decrease of 4 over the total for the previous year.

STANFORD HOSPITAL LABORATORY

	1940-41	1941-42	1942-43
Urines	2,623	2,786	3,068
Blood counts.....	5,366	5,981	5,426
Feces	440	434	532
Gastric contents	64	43	67
Cerebrospinal fluids	128	154	193
Sputa	127	98	118
Miscellaneous examinations	209	194	177
Blood chemical examinations.....	4,659	4,487	5,228

CLINICAL LABORATORY

	1940-41	1941-42	1942-43
Urines	5,956	5,778	3,942
Blood counts	5,584	4,963	4,465
Feces	468	446	352
Cerebrospinal fluids	754	517	473
Sputa	471	401	255
Miscellaneous examinations	34	23	62

SEROLOGICAL LABORATORY

	1940-41	1941-42	1942-43
Wassermann tests	6,974	6,836	7,402
Colloidal gold tests	1,244	915	882
Hinton tests	5,626	5,825	6,503

During the year, the Clinical Laboratory was enlarged and reorganized under the direction of Dr. Robert S. Evans who was appointed last year assistant to Dr. Harry Wyckoff. There has been a marked improvement this service and many of the physicians working in the out-patient department have expressed appreciation for the faster service and co-operation which this department has furnished.

BACTERIOLOGY LABORATORY

	1941-42	1942-43
Specimens examined	7,969	7,433

BASAL METABOLISM AND ELECTROCARDIOGRAPH LABORATORY

	1942-43
Clinic basal metabolism tests	595
Private basal metabolism tests	724
Total	1,319
Clinic electrocardiograms	1,188
Private electrocardiograms	739
Total	1,927
Total number of patients	3,246

SOCIAL SERVICE DEPARTMENT

During the year, because of the shortage of hospital beds, the need for convalescent facilities has become more accentuated and the scarcity of such facilities has become more obvious. Convalescent and nursing homes in the city have remained crowded and each of them have long waiting lists.

During the year, a full-time occupational therapist was employed which has allowed us to render this service to the patients in the psychiatric ward as well as other parts of the hospital.

OUT-PATIENT DEPARTMENT

During the fiscal year from September 1, 1942, through August 31, 1943, there were 104,225 visits to the Out-Patient Department of Stanford University Hospitals.

This is a decrease of 15.7 per cent from 1941-42 and a decrease of 26.3 per cent from 1940-41; these are parallel to the decreases in other communities.

The visit statistics for the present year as compared with previous years are given below:

	1938-39	1939-40	1940-41	1941-42	1942-43
Dental	1,026	980	835	724	668
Children's	16,234	16,960	18,363	17,636	15,821
Skin	4,377	4,083	4,288	3,856	3,136
Luetic	23,628	19,617	15,823	16,489	14,209
Neuropsychiatry	11,788	9,847	9,053	4,133	3,505
Medical	19,506	21,593	24,621	21,035	17,433
Bone and joint	4,393	4,114	4,669	4,444	3,414
Men's	17,244	13,987	10,630	6,145	3,954
Ear, nose, and throat	12,582	11,243	11,283	10,136	8,397
Eye	11,222	10,841	11,528	9,438	7,844
Surgical	15,505	15,090	15,388	14,767	11,188
Chest	1,870	1,323	1,707	1,465	1,150
Women's	14,651	13,764	13,930	13,430	13,506
Total visits	154,026	143,367	142,068	123,698	104,225
Average daily visits			462.8	402.9	339.5
Average daily new visits			26.6	26.6	28.1

The Medical Clinic area was completely rebuilt in October and November 1942. It was opened at Dr. Bloomfield's medical rounds on November 20, 1942. Four additional examining rooms and a darkroom for the fluoroscope were provided.

The Pediatric Clinic and Waiting Room were refurnished during the spring, with new floor covering, paint, and acoustical treatment. Following this, the Well Baby Clinic received the same renovation. More examination areas were thus provided for the use of the medical students. The acoustical treatment decreased the noise which carries into Lane Hall.

All of the second floor except the Dermatology and Cardiac Clinics have been renovated and it is planned that these may soon be completed.

On the first floor the Medical Record Department office was refurnished and equipped with adequate furniture.

A colloid mill was installed in the Pharmacy which provides manufacturing facilities for making suspensions. In the basement 48 stock filing drawers were installed. It is planned to install more of these to provide both orderly and clean storage for stock.

The Medical Record Department is staffed by three medical record librarians. In spite of the difficulties of employment in this department, a new system of calling our records was installed. This reorganization has been slow and discouraging. However, at the present time, it appears that success will be attained. The cross indexing of diagnosis which had lapsed two years is now being worked on sufficiently to keep it from going farther back. When another record librarian can be found, it is thought that this work will progress rapidly inasmuch as some gain is now being made.

DEPARTMENT OF DIETETICS

	1941-42	1942-43
Lane patients, regular house diets.....	74,017	85,554
Lane patients, special diets.....	47,940	40,506
Stanford patients, regular house diets.....	132,284	136,200
Stanford patients, special diets.....	19,325	21,480
Nurses, employees, and house staff.....	298,414	230,834
Special Diet Laboratory		
Regular meals	44,008	59,023
Special diets	2,413	2,040
Total	618,401	575,637
Average daily meals	1,694	1,577

There have been only two changes in our dietary staff. With the appointment of Miss Louise Esch as Assistant to Superintendent, the last November, Miss Helen Hawver became the Director of Dietetics.

The shortage and rationing of food has limited us to a great extent on our menus. With some limitations, we have been able to get enough point for food, but we have not always been able to get the foods we desired. We do not give our Stanford patients a menu of selective foods. To our personnel, we have had to limit many foods to one serving only.

Our student dietitians' course is progressing nicely and in October we received the approval of our course by the American Dietetic Association.

There are now nine students taking the course, and sixty applications for this year's course have been received.

The American Red Cross is sponsoring a course for nutrition aides and has asked our help in the training of these people. After completion of the course each person will give 150 hours of volunteer help to the hospital. We are glad to aid in this program and will receive a great deal of benefit from it.

PHYSICAL THERAPY

The department, in co-operation with the School of Health for Women at the University, has carried on an extensive educational program for physical therapy technicians. Two students have completed the six months' emergency course for physical therapy technicians entering the Army and seven students completed the regular course of training for technicians, making a total of seventeen graduated during the year. In addition to the regular education program, postgraduate courses have been given to six doctors, seventy-one nurses, and forty technicians in their respective duties and responsibilities in carrying out the Kenny procedure for the care of acute anterior poliomyelitis. These courses extended at intervals from October 1942 to September 1943. The technicians' and nurses' courses have been under the general direction of Miss Lucille Daniels, assistant professor in the School of Health for Women at the University; the doctors' course was given under the direction of the director of physical therapy.

A five-bed unit consisting of two wards to care for convalescent poliomyelitis patients was established in the Physical Therapy Department during the summer and the first patient was admitted on July 19. This unit, which is an emergency arrangement, has greatly simplified the treatment of patients by members of the staff. The patients are admitted on the neurology service but the treatment program, aside from nursing, is handled entirely by the physical therapy staff. To date, six patients have received treatment in this unit. Many more have applied for admission but have been refused because of the lack of beds.

The number of patients treated in 1942-43 showed an increase of 376 over the number treated in 1941-42. A further increase was limited by lack of technical personnel and by hospital bed space for poliomyelitis cases.

DEPARTMENT OF NURSING

The problem of providing nursing care and nursing service during wartime is a trying task. It has been particularly difficult this year and promises to be even more so as the war progresses and trained nurses are called.

GENERAL-DUTY NURSES

September 1, 1940	144.75
September 1, 1941	117.00
September 1, 1942	97.50
September 1, 1943	83.50

This steady decrease in the number of general-duty nurses reveals that nurses who resigned from the staff cannot be replaced (nurse for nurse).

Several means of supplementing nursing service rendered by the general-duty nurses have been utilized.

The program entitled "Staff Replacement" has continued sporadically throughout the year. Under this plan special-duty nurses volunteer to work on the general-duty staff of hospitals for 30 days during the year at the prevailing staff salary. According to the number of special-duty nurses listed with the Nurses' Official Registry, Stanford should have had 160 weeks of nursing care during 1942-43. Only 54 weeks have been supplied by this means. Obviously, this method has not been successful.

To the nine graduate nurses who have volunteered their services throughout the year, we owe a deep debt of gratitude. They have left home responsibilities in many instances, have had difficulty in transportation to the hospital, yet have been most faithful and loyal.

The Red Cross Volunteer Nurse's Aide Corps has likewise been a very valuable supplement to the depleted graduate staff. An average of 49 nurse's aides monthly contributed a monthly average of 1,433 hours of service during the year. Our appreciation is twofold: first, to the American Red Cross for training the aides, and, secondly, to the individuals themselves who are serving the hospitals in this time of dire need.

The Stanford Women's Volunteer Corps, who have conscientiously sewed and made dressings and other supplies, have rendered a service which was invaluable.

Under the Office of Volunteer Services, women have been assigned to the Nursing Department who act as clerks on the larger divisions. One businessman has pioneered with us in the field of "Volunteer Orderly." Through his efforts, it is to be hoped a group of "Volunteer Orderlies" will be organized, trained, and used in the future.

Nonprofessional workers have been assigned all nonprofessional duties which were formerly delegated to nurses. Competition with industry, however, is lessening the number of auxiliary workers materially. Unfortunately, the greater load which nurses are carrying allows less time for the supervision of this ever changing group.

Nursing procedures have been revised and more modern equipment has been purchased, where possible, in order to conserve nurses' precious time.

The coming year promises to be more difficult than this year has been, in attempting to supply adequate nursing care to patients. It is only with the understanding and co-operation of the medical staff that it will be possible to continue caring for so many patients with so few nurses.

STAFF

The residents were Dr. Donald Petit, medicine; Dr. Victor Richards, surgery; Dr. W. Dayton Clark, obstetrics and gynecology; Dr. James O. Dowrie, pediatrics; Dr. Virgil Hepp, ear, nose, and throat; Dr. Paul Reinhardt, ophthalmology; Dr. Grace Footer, neuropsychiatry; Dr. Ford Shepherd, radiology; Dr. Harry Howard, anesthesiology.

The assistant residents were Dr. Alan Abrams, Dr. Charles Armstrong, Dr. William Kirby, medicine; Dr. August Meier, Dr. John F. Menke, Dr. Otto Tuschka, Dr. John J. Niebauer, surgery; Dr. Harold Lyons, Dr. Sarah

Bowen, Dr. Frederick M. Hanson, obstetrics and gynecology; Dr. Mason Abramson, Dr. Grace Kleiser, Dr. Francis Robinson, pediatrics; Dr. Earle H. McBain, Dr. Margaret Henry, ophthalmology; Dr. M. Elizabeth Jenkins, Dr. Charles Grayson, Dr. John von Saltza, radiology; Dr. John D. Walsh, men's urology.

The interns were Dr. John H. Abendroth, Dr. Daryl E. DeBell, Dr. Herbert C. Staveren, Dr. Hyman J. Zimmerman, Dr. Robert R. Morris, Dr. Charles J. Wallace, Jr., medicine; Dr. William E. Bloomer, Dr. Dow H. Ransom, Jr., Dr. Walter Neil Jensen, Dr. Robert W. Klingel, Dr. John M. Mott, Dr. Clarence A. Spaulding, surgery; Dr. Gerald Mraz, pathology.

CONSTRUCTION AND IMPROVEMENT

With the exception of the new work which has previously been reported in the Out-Patient Department, the work of the Maintenance Department during the year was largely confined to that of painting and repair. Scarcity of materials has made it impossible to carry on structural changes which have been considered.

SUMMARY

As reported in the last annual report, there has continued to be a shortage of hospital beds which was most marked during January, February, and March of the current year.

Personnel shortage during the year has been our greatest problem and if it becomes more acute during the coming year, it is probable that it may become necessary to close some of our beds.

Great credit is due to the personnel who have continued to work at the hospitals during the past year under the trying conditions which have existed since the outbreak of the war. There have been 230 of our personnel who have gone directly into military service.

During the year, the Purchasing Department was moved to the second floor of the Lane Library and a new "Department of Stores" as a division of the hospitals was created. Mr. Claud Baker was appointed to the position of storekeeper on September 5, 1942. The division of this department has allowed for greater expansion and space.

During the year the volunteer services have increased greatly and they have made a definite contribution to the service given the patient at the hospital. It was felt desirable, because of the many groups involved, to establish an Office of Volunteer Service in order to co-ordinate all volunteer activities. Mrs. Martha Gerbode and Mrs. Mildred Schilling were appointed co-ordinators and have been doing an excellent job during the year in stimulating and directing services. I would like to take this opportunity to thank the Stanford Volunteer Corps, Junior League of San Francisco, San Francisco Chapter of the American National Red Cross, the American Women's Voluntary Service, The Stanford Convalescent Home Auxiliary, the Young Women's Christian Association, and a great number of individuals not associated with any of the above groups who contributed volunteer service. The Clinical Committee, the Finance Committee, the Dean, Medical Staff, my immediate assistants, department heads, and all the per-

sonnel of the hospitals and clinics have greatly assisted in the operation of the institution during the past year. Once again, I wish to express my appreciation to the above groups.

PALO ALTO HOSPITAL

The following is the report of the Palo Alto Hospital. There were 6,070 patients admitted during the year ending June 30, 1943. The following table gives the statistical picture.

HOSPITAL STATISTICS			
	1940-41	1941-42	1942-43
Patients admitted			
Residents of Palo Alto.....	1,210	1,239	1,702
Nonresidents	3,464	3,828	4,368
Student Guild	1,015	781	557
Men	1,650	1,571	1,494
Women	2,521	2,779	3,601
Children	503	717	975
Births	594	749	1,236
Deaths	92	106	157
Patient days	33,772	37,689	45,703
Daily average number of patients.....	92	103	125
Income per patient day.....	\$9.41	\$9.66	\$9.56
Cost per patient day.....	\$7.74	\$8.02	\$8.11
Cost per patient day exclusive of labora- tory and X-ray	\$7.14	\$7.39	\$7.59
Percentage of occupancy, rooms.....	46.6	59.2	65.2
Percentage of occupancy, wards.....	64.5	66.5	85.7
Percentage of occupancy, total.....	56.7	66.3	76.8
OPERATING ROOM			
Major operations	629	687	880
Minor operations	671	740	689
Ear, eye, nose, and throat.....	324	422	580
Plaster dressings	133	151	156
Rendering first aid	371	394	500
Obstetrical patients	581	729	1,231
	2,709	3,123	4,036

ANTHONY J. J. ROURKE, M.D.
Physician Superintendent

STANFORD SCHOOL OF NURSING

This year marks the forty-seventh graduation from this School of Nursing.

Miss Minnie E. Pohe, R.N., B.S., director of the School of Nursing and Nursing Service, was given a one-year leave of absence to join the United States Public Health Service to assist with the United States Cadet Nurse Corps program.

Because of the necessity for more graduate nurses, the School has made a definite effort to enroll an increased number of students. To this end, it was possible to admit 3 more students than the previous year, and 22 more than were admitted in 1940-41.

The total number of new students enrolled in the School during the academic year was 57.

September registration	42
February registration	15

Resignations from group admitted during academic year.....	2
Resignations from entire student body for same period.....	14

Two of these resignations were students who were to be married.

Total student census for:

August 31, 1941	97
August 31, 1942	119
August 31, 1943	127

In the past year, 24 students enrolled in the Degree Course graduated and received their Baccalaureate degree in June.

Federal funds.—A grant was received from the United States Public Health Service to be used for the basic program in the Nursing School. This fund provided for the following:

1. Ten tuition scholarships were granted to students entering February 1, 1943.
2. The Bacteriology Laboratory was renovated and made into a much-needed classroom.
3. Chairs were purchased for this room.
4. A divisional supervisor was obtained for the following units where students were placed—A4, A2, II East.

Information was sent to 42 colleges and universities regarding the available funds for tuition.

State Board examinations.—A total of 27 graduates have taken the examination for Registration and Licensing given by the Board of Nurse Examiners in this state during this year and were licensed.

Affiliate students.—The affiliations for pediatric, psychiatric, and private-patient nursing care have continued as in previous years. The total number of students affiliating from the three schools was 63.

Close correlation and co-operation between the School of Nursing and the Registrar's office has been in evidence. Miss Sue Curtis, the credentials secretary, and Miss Pohe, the director of the School of Nursing, made two trips during the year. In December 1942 they visited two colleges, and in March 1943 they visited eight junior colleges and colleges in southern California. They contacted a large number of pre-nursing students, as well as advisers and counselors.

United States Cadet Nurse Corps.—When the federal government organized this program under the United States Public Health Service, it was done with a view to enrolling 65,000 new students in schools of nursing this year. The program here was accelerated to 30 months, and application made to participate.

Changes in key positions on the faculty.—Minnie E. Pohe was given a year's leave of absence to assist with the United States Cadet Nurse Corps program.

Miss Grace E. Ringressy was appointed acting director of Nursing Service for the year.

Miss Sally Heitman was appointed acting director of the School of Nursing for the year.

Changes in the curriculum.—Public Health and Sanitation was reduced from three units to two units. Educational Psychology was reduced from three units to two units. Both of these changes took place in the spring of this year.

Increased demands upon the doctors' time have been evident in their teaching, in that classes are having to be canceled more frequently. However, all of the doctors have been most co-operative in their assistance with our teaching program and their efforts are greatly appreciated.

The faculty members of the School of Nursing are to be commended because they have carried classes for an increased number of students, in addition to their many responsibilities on the wards. The splendid support and assistance given by the Clinical Committee of the Stanford University Hospitals, and the Physician Superintendent have been appreciated greatly.

SALLY HEITMAN, R.N.

Acting Director School of Nursing

SCHOOL OF PHYSICAL SCIENCES

The Executive Committee of the School consisted of Eliot Blackwelder, Paul Kirkpatrick, Frederick Otto Koenig, George S. Parks, and Gabor Szegö.

As in past years the courses in the history and content of the physical sciences were continued. The electron microscope project, outlined in last year's report, progressed in a manner that is described elsewhere in this volume.

PAUL KIRKPATRICK

CHEMISTRY

The teaching and research staff consisted of William Henry Sloan, Robert Eckles Swain, professors emeriti; Francis William Bergstrom, Philip Albert Leighton, James Murray Luck, James William McBain, Carl Robert Noller, George Sutton Parks, professors; Herman Augustus Spoehr (Director, Carnegie Institution of Washington), professor (by courtesy); Frederick Otto Koenig, Hubert Scott Loring, Richard Andrew Ogg, Jr., associate professors; James Hollingsworth Clemmer Smith (Carnegie Institution of Washington), associate professor (by courtesy); Robert D. Rowe (ESMWT), acting assistant professor; Lockhart Burgess Rogers, instructor; Richard Hanson Coe (summer quarter), Alice J. Dwyer (ESMWT, summer

BACTERIOLOGY LABORATORY

	1941-42	1942-43
Specimens examined	7,969	7,433

BASAL METABOLISM AND ELECTROCARDIOGRAPH LABORATORY

	1942-43	
Clinic basal metabolism tests.....	595	
Private basal metabolism tests.....	724	
Total	1,319	
Clinic electrocardiograms	1,188	
Private electrocardiograms	739	
Total	1,927	
Total number of patients.....	3,246	

SOCIAL SERVICE DEPARTMENT

During the year, because of the shortage of hospital beds, the need for convalescent facilities has become more accentuated and the scarcity of such facilities has become more obvious. Convalescent and nursing homes in the city have remained crowded and each of them have long waiting lists.

During the year, a full-time occupational therapist was employed which has allowed us to render this service to the patients in the psychiatric ward as well as other parts of the hospital.

OUT-PATIENT DEPARTMENT

During the fiscal year from September 1, 1942, through August 31, 1943, there were 104,225 visits to the Out-Patient Department of Stanford University Hospitals.

This is a decrease of 15.7 per cent from 1941-42 and a decrease of 26.3 per cent from 1940-41; these are parallel to the decreases in other communities.

The visit statistics for the present year as compared with previous years are given below:

	1938-39	1939-40	1940-41	1941-42	1942-43
Dental	1,026	980	835	724	668
Children's	16,234	16,960	18,363	17,636	15,821
Skin	4,377	4,083	4,288	3,856	3,136
Luetic	23,628	19,617	15,823	16,489	14,209
Neuropsychiatry	11,788	9,847	9,053	4,133	3,505
Medical	19,506	21,593	24,621	21,035	17,433
Bone and joint.....	4,393	4,114	4,669	4,444	3,414
Men's	17,244	13,987	10,630	6,145	3,954
Ear, nose, and throat.....	12,582	11,243	11,283	10,136	8,397
Eye	11,222	10,841	11,528	9,438	7,844
Surgical.....	15,505	15,090	15,388	14,767	11,188
Chest	1,870	1,323	1,707	1,465	1,150
Women's	14,651	13,764	13,930	13,430	13,506
Total visits	154,026	143,367	142,068	123,698	104,225
Average daily visits.....			462.8	402.9	339.5
Average daily new visits.....			26.6	26.6	28.1

The Medical Clinic area was completely rebuilt in October and November 1942. It was opened at Dr. Bloomfield's medical rounds on November 20, 1942. Four additional examining rooms and a darkroom for the fluoroscope were provided.

The Pediatric Clinic and Waiting Room were refurnished during the spring, with new floor covering, paint, and acoustical treatment. Following this, the Well Baby Clinic received the same renovation. More examination areas were thus provided for the use of the medical students. The acoustical treatment decreased the noise which carries into Lane Hall.

All of the second floor except the Dermatology and Cardiac Clinics have been renovated and it is planned that these may soon be completed.

On the first floor the Medical Record Department office was refurnished and equipped with adequate furniture.

A colloid mill was installed in the Pharmacy which provides manufacturing facilities for making suspensions. In the basement 48 stock filing drawers were installed. It is planned to install more of these to provide both orderly and clean storage for stock.

The Medical Record Department is staffed by three medical record librarians. In spite of the difficulties of employment in this department, a new system of calling our records was installed. This reorganization has been slow and discouraging. However, at the present time, it appears that success will be attained. The cross indexing of diagnosis which had lapsed two years is now being worked on sufficiently to keep it from going farther back. When another record librarian can be found, it is thought that this work will progress rapidly inasmuch as some gain is now being made.

DEPARTMENT OF DIETETICS

	1941-42	1942-43
Lane patients, regular house diets.....	74,017	85,554
Lane patients, special diets.....	47,940	40,506
Stanford patients, regular house diets.....	132,284	136,200
Stanford patients, special diets.....	19,325	21,480
Nurses, employees, and house staff.....	298,414	230,834
Special Diet Laboratory		
Regular meals	44,008	59,023
Special diets	2,413	2,040
Total	618,401	575,637
Average daily meals	1,694	1,577

There have been only two changes in our dietary staff. With the appointment of Miss Louise Esch as Assistant to Superintendent, the last of November, Miss Helen Hawver became the Director of Dietetics.

The shortage and rationing of food has limited us to a great extent on our menus. With some limitations, we have been able to get enough points for food, but we have not always been able to get the foods we desired. We do not give our Stanford patients a menu of selective foods. To our personnel, we have had to limit many foods to one serving only.

Our student dietitians' course is progressing nicely and in October we received the approval of our course by the American Dietetic Association.

member meeting of the American Chemical Society at Buffalo. Also he has continued his X-ray studies of soap and liquid crystals.

Seven members of the group are working for advanced degrees. A. P. Brady is studying the conductivity, freezing point, and vapor pressure of colloidal electrolytes and electrolytic detergents in water. K. Johnson is studying suspending action of solubilizers in aqueous systems. C. G. Lindquist and R. C. Thorburn have worked on the relations in ternary soap systems and their relation to soap boiling. D. G. Pye has continued the study of soaps in a high centrifugal field. G. Shreve has mapped out the vapor-pressure relations of different soaps at various temperatures. W. Woods has continued his work on the Jamin and contact angles with kerosene and oils.

Mrs. McBain has completed a study of the changes in oleic acid after reaction with alkalis and also the spectroscopic study of periodic changes in light absorption of sodium oleate solutions.

Professor McBain read papers by invitation at the Buffalo meeting of the American Chemical Society in September and at the local section of the American Chemical Society at Berkeley in December. He served as vice-chairman of the Colloid Division of the American Chemical Society and as member of the Committees on Colloid Science and on Structure of Liquids of the National Research Council. He is a member of Committee 12 on Soaps and Detergents of the American Society for Testing Materials.

Professor Noller, in collaboration with M. R. Barusch, has completely elucidated the structure of bethogenin, the isolation of which was reported a year ago. It is the methyl derivative of the dicyclic form of a hydroxy- γ -aldehyde and has a structure analogous to that of a methyl glycoside.

David Frazier, working under the supervision of Dr. Noller, has succeeded in converting echinocystic acid into oleanolic acid, thus proving that the former is a beta-hydroxyoleanolic acid. Miss Donna Cosulich has simplified the problem of the isomeric nordiones derived from echinocystic acid by proving that only three exist instead of four as previously reported and by showing that in one of them the double bond is conjugated with the carbonyl group. The work of Frazier and of Cosulich gives chemical proof that the basic structures currently accepted for the triterpenoids are untenable. This view is supported by the positions of the maxima in the ultraviolet absorption spectra of many of the triterpenoid derivatives.

Professor Noller and A. J. Castro have continued work on the synthesis of compounds related to the alkaloid chelidonium and on the determination of the structures of the products formed by the action of epoxy-compounds with amines.

Because of the request for co-operation in the synthesis of better anti-malarials, a program of research in this field has been initiated. J. L. Bills has been engaged in the synthesis of pyridyl and pipyridyl isoquinolines, and R. Bede Ernsdorff in the synthesis of 8-pyridylalkylamino-6-methoxy-isoquinolines, and W. L. Jensen in the synthesis of di-quinolyldimethanes.

Professor Noller has held appointments as consultant and official investigator for the N.D.R.C. during the past year; and C. D. Heaton and L. Kaplan have been his full-time research assistants in connection with this work. He has also continued to serve as a member of the Advisory Board of Organic Syntheses.

Professor Parks, with the aid of his students, continued his extensive studies on the thermodynamic properties of organic compounds. During the past year attention was focused especially on certain typical hydrocarbons of high molecular weight, which had been prepared in a research project of the American Petroleum Institute at Pennsylvania State College. With Benjamin F. Naylor and Leslie A. McClaine, specific heat measurements between 80° and 300° K. were made on three of these compounds, 11-n-decylheneicosane, 11-phenylheneicosane and 11-cyclohexylheneicosane, by the Nernst method. From such data the molal entropies of these hydrocarbons were then calculated. In another investigation Mr. Naylor determined the heats of combustion of these three hydrocarbons and of 13-phenylpentacosane and 13-cyclohexylpentacosane by the bomb calorimeter method with an uncertainty of only 0.02 to 0.04 per cent. Combination of such combustion values with the preceding entropies then yields the free energies of formation of the hydrocarbons and shows the effects of various substituents, such as the n-decyl radical, the phenyl group, and the cyclohexane ring, upon the stability of long-chain paraffinic compounds. With Mr. McClaine, precise combustion measurements were also carried out on certain polyhydroxy alcohols, such as erythritol, dulcitol, and mannitol, in order to increase the accuracy of the present free energy values for these particular compounds.

Associate Professor Koenig continued his studies, in collaboration with Dolores Bandini, on the surface tension of mercury in equilibrium with solutions of mercurous salts, and with Harold E. Kirkby on the densities of solutions of lauryl sulfonic acid and its salts. He also, with Dolores Bandini, renewed a theoretical study which had lain idle for twelve years, on the calculation of heats of adsorption from surface tension. In addition he made further progress on his projected book on electrochemical thermodynamics.

At the invitation of the Stanford School of Humanities, Professor Koenig contributed a paper entitled "Science and the Humanities" to the conference held in May 1943 under the auspices of that school.

The work of Associate Professor Loring on the chemistry of ribonucleic acids has been continued with the assistance of Fred H. Carpenter, Carlton E. Schwerdt and Paul M. Roll. Mr. Carpenter has essentially completed the problem of the identification of the hydrolysis products formed by the action of crystalline ribonuclease on ribonucleic acid. The four nucleotides, guanylic, adenylic, uridylic, and cytidylic acids, produced by alkaline hydrolysis were isolated and identified after enzymic hydrolysis. As a portion of the original nucleic acid molecule is resistant to the action of ribonuclease, it appears that there are at least two types of linkages present. Mr. Schwerdt has isolated and identified the two pyrimidine nucleotides present in tobacco mosaic nucleic acid. These proved to be identical with the pyrimidine nucleotides found in yeast ribonucleic acid. This was accomplished even though the amount of starting material available was only about 5 gms., in contrast to the amount of 100 gm. which is usually used for such an experiment. Mr. Roll is continuing the work on the chemistry of ribonucleic acid with particular reference to the types of linkages which are hydrolyzed by ribonuclease and to the nature of the ribonuclease-resistant fraction.

In collaboration with Mr. J. G. Pierce, Professor Loring has worked out the growth requirement of three mutant strains of *Neurospora* produced by

Dr. George Beadle. Two of these were found to require the pyrimidine nucleosides or nucleotides for normal growth. It is not known whether or not these compounds will also prove to be growth factors for naturally occurring organisms or higher animals, but this seems highly probable.

In collaboration with Mr. Schwerdt, the program of research on the purification and properties of poliomyelitis virus has also been continued. The pH stability range and the sedimentation velocity of the MV strain of virus have been determined with a fair degree of accuracy. Work has been started on the cotton-rat-adapted Lansing strain.

The work on *Neurospora* was made possible through a Nutrition Foundation Fellowship provided to Mr. Pierce by Dr. Beadle. That on poliomyelitis received the financial support of the National Foundation for Infantile Paralysis.

Associate Professor Ogg continued studies in the field of reaction kinetics. With Russell R. Williams, Jr., a careful study has been made of the photo-reaction between gaseous hydrogen iodide and methyl iodide. With Karl Zimmerman, studies on co-ordination reactions of amine bases and triphenyl methane dyes have been extended. With Claude A. Rackus the isotopic exchange reaction in the gaseous bromine-deuterium-hydrogen bromide system was reinvestigated. With Dan K. Lynch, there has been undertaken an investigation of halogenation reactions of cyclo-propane derivatives in solution. With Miss Nancy Cross there has been undertaken a study of hydrogen isotopic exchange reactions, using the radioactive isotope tritium.

Instructor Rogers, serving as an associate in the War Department Civilian Protection School at Stanford, supervised the laboratory instruction of civilian defense groups in the detection of war gases. In research, Dr. Rogers, with the help of G. P. Haight, Jr., started an investigation of complex uranium compounds and in this work prepared several new triple salts. Likewise, with Harold Eding, he began a spectrophotometric study of soluble uranium complexes. With the collaboration of Richard H. Coe, a manual instrument for making current-voltage (polarographic) studies of solutions has been assembled and its applications are now being extended to include additional reducible ions.

I am pleased to record here the promotions for next year, of Associate Professor Koenig to the rank of professor, and of Instructor Rogers to the rank of assistant professor.

In addition to the foregoing activities, mostly of a research character, the department faculty has presented, during the past year, the most extensive instructional program in its history. To facilitate the studies of civilian students, many of whom are now working on a four-quarter basis, an unusual number of the fundamental courses have been repeated at various times during the year. This repetition was a special feature of the work of the past summer quarter, in which seventeen chemistry courses were offered to civilian students as against twelve in 1942 and only five in 1941.

Several special courses have also been presented. Noteworthy among these was one for training chemical technicians for industry. This was given four times during the year by Acting Professor Rowe as part of the Engineering, Science, and Management War-Training program. In this course women, who had graduated from high school and whose records indicated the proper

aptitude, were given an intensive training, forty hours per week for twelve weeks, to prepare them for industrial positions involving routine analytical work. The women completing this course have found an urgent demand for their services in various war industries.

Another set of special courses has been provided for various groups of army trainees. This type of work started in April with refresher courses for STAR trainees. It grew to such an extent that during the summer term twelve ASTP classes in chemistry were also being given to trainees in the basic phase, chemical engineering, and premedical units.

In response both to an ever-growing demand from civilian students and to the requirements of the Army Specialized Training Program for chemical engineers, this department has now definitely entered the field of chemical engineering. During the summer quarter Mr. Lindquist gave two lecture courses: one in the "Principles of Chemical Engineering" to twenty-five civilians and a second in "Industrial Chemical Calculations" to fifteen Army trainees. Such courses are being continued during the academic year 1943-44 by Mr. Lindquist, who has been appointed acting assistant professor of chemical engineering for this purpose. With the approval of the Board of Trustees, Room 63 in the Chemistry Annex is being converted into a laboratory for unit operations at a cost of approximately \$7,000. Laboratory courses in chemical engineering for both civilians and trainees are planned for the winter and spring quarters of 1944.

Owing to the pressure of war research and the training of students for essential service in chemistry, the summer research conference and the weekly seminar hitherto sponsored by the department were set aside during the past year. Special lectures were given by two visitors: one by Dr. J. E. Todd, assistant dean of the Institute of Paper Chemistry of Appleton, Wisconsin (January 25), and a second by Professor Harold Hibbert of McGill University (May 27, 1943).

GEORGE S. PARKS

*Professor of Chemistry and Acting
Executive Head of the Chemistry Department*

DIVISION OF ELECTRON OPTICS

The staff consisted of L. Marton, associate professor of electron optics, R. G. E. Hutter, research associate, and B. F. Bubb, mechanic. In addition to the regular staff, Mrs. C. Marton devoted considerable part of her time to voluntary collaboration and Associate Professor F. Molnar helped, as during the previous year, with a number of drawings.

The housing problem of the Division of Electron Optics was solved during the autumn quarter when Professor Morris, dean of the School of Engineering, offered the space occupied by his offices. After transformation of the rooms into laboratories, equipment was moved in in December 1942. Assembly of the first electron microscope was started in January 1943. Partial operation of the first instrument started in April 1943. Further work progressed on the design of a second instrument for about the same electron energy as the first and on a third for considerably higher electron energy.

Professor Marton offered courses in electron optics and, in collaboration with Professor Karl Spangenberg, in high vacuum and electronics. He presented a paper in collaboration with R. G. E. Hutter on the "Optical Conditions of Electron Microscopes" at the December 1942 meeting of the American Physical Society in Los Angeles. A second paper was presented in collaboration with R. G. E. Hutter about "Optimum Conditions for Apertures of Spherical Electron Lenses of the Field Form— $H(x) = H_0/(1 + [x/a]^2)$ " at the July 1943 meeting of the American Physical Society at Stanford University.

During the academic year a considerable number of invited papers were given by Professor Marton from which the following might be listed: American Physical Society (1), American Chemical Society (8 different papers), Western Reserve University (2), University of Minnesota (1), etc. Professor Marton also served on a committee appointed by the president of the American Physical Society charged with the formation of a Division of Nuclear and Ion Optics.

Research Associate R. G. E. Hutter continued his work on the development of power supplies for electron microscopes. He also carried out theoretical investigations on the properties of electron optical lenses, from which results were presented in collaboration with Professor Marton, and a further result, the "Validity of Lens Equation and Magnification Formula of Light for Electron Lenses," was presented at the July 1943 meeting of the American Physical Society at Stanford University.

Professor C. Marton compiled, in collaboration with S. Sass of the University of Michigan, a "Bibliography of Electron Microscopy," which was adopted by the Electron Microscope Society of America for distribution among their members.

L. MARTON
Associate Professor

GEOLOGY

The staff of the department included Eliot Blackwelder, Malcolm Brusca,* Siemon William Muller,* Austin Flint Rogers (emeritus), Hubert W. Schenck, Aaron Clement Waters,* professors; Harold Frederic Schuchert, acting professor; Konrad Bates Krauskopf,* Benjamin Markham, associate professors; Donald Duncan Hughes, acting associate professor; Myra Keen, curator; Hans Karl Stauffer, Earl H. Myers, and others, associates; Elsbeth Madvig, department secretary; Yves Oscar Forch, research fellow; Robert R. Compton, John F. Curran, Robert L. Darneal, and J. J. Mapel, Robert F. Stopper, George W. Walker, assistants in geology.

Bailey Willis (emeritus) devoted most of his time to preparing geological reports for the War Department on certain foreign localities. He made a laboratory study of the effect of lime upon bentonite clays, which was an important factor in the Panama Canal slides, and he submitted a report

* Leave of absence during part of the year for work related to the war.

* Signed to join the United States Navy.

thereon to the chief geologist of the Canal Zone. In co-operation with the New Mexico Association on Indian Affairs he made a reconnaissance of the Rio Grande Valley west of Santa Fe and reported on the geological conditions affecting a proposed dam which if built would have flooded the pueblos. During the year he published two addresses, one on "American Geology 1850-1900" and the other on the "Life History of Theory."

Mr. Rogers (emeritus) during the autumn quarter visited the Universities of Kansas and Utah and at both places gave illustrated lectures on jade. He published during the year one paper on "American Synthetic Emerald." In addition he made addresses on various mineralogical subjects before local scientific societies in the Bay region and Sacramento. Owing to the depletion of the staff it was found necessary to recall Mr. Rogers to active duty during the winter and spring quarters to the extent of giving one course of instruction.

Mr. Tolman (emeritus) was continuing his work as geological consultant for the Henry J. Kaiser Company, but while on one of his numerous trips he died suddenly on October 11 at Spokane, Washington. During the twenty-six years he was a member of the Stanford faculty he became known as one of the leading economic geologists of Western United States and made important contributions to such diverse subjects as the geology of copper ores, petroleum and natural gas, engineering construction, and underground water.

Mr. Blackwelder was on duty all four quarters and in addition took over part of Mr. Lynn's course in the geology of oil and coal in the winter quarter and the lectures in Mr. Krauskopf's course in physical sciences during the spring. In the spring and summer quarters he participated in teaching the geography of Europe and Germany to soldiers in one of the local units of the Army. In March he went to Washington as a member of a special committee of the National Academy of Sciences to nominate a new director for the United States Geological Survey. Later the Secretary of the Interior appointed him a member of the standing Advisory Committee on the affairs of the Survey. He published one paper on "The Process of Mountain Sculpture by Rolling Débris," as well as several newspaper articles on current affairs.

Mr. Kildale, after completing the summer field geology course in September, took leave for the rest of the year, in order to engage in the search for war mineral deposits for the International Smelting Company.

Mr. Muller spent the entire year in the United States Geological Survey at Washington, engaged in special studies for the War Department. He made a short trip to Nevada in the summer to assist in the campaign for ore deposits for war purposes.

Mr. Schenck was on duty until the end of the spring quarter. He published two reviews and three papers. The most important of these, written jointly with Mr. Muller, was entitled "Standard of the Cretaceous Systems." He served as a member of one of the technical subcommittees of the National Research Council, as chairman of the Cordilleran Section of the Geological Society of America, and was also elected vice-president of the Stanford Chapter of Sigma Xi. He edited two papers, by Miss Lois T. Martin and Mr. E. H. Myers, and also the second department newsletter to alumni. He aided the War Department in a technical problem relating to the Panama

Canal and also served as one of the lecturers on the geography of Germany for the Army Specialized Training Program. Having been commissioned as a major in the Army, he began active service in July in the Provost Marshal's division.

Mr. Waters was in residence only during the autumn quarter. In that time he edited the department newsletter to alumni and finished for the government a report on a quicksilver mining district in Oregon. During the rest of the year he was employed by the United States Geological Survey in studying several mining districts in western Texas, Arkansas, and central Oregon. Eventually he was placed in charge of the government's search for quicksilver ores.

Mr. Lynn was appointed in December to replace Mr. Kildale temporarily as professor of economic geology, but early in January he was unexpectedly called to active duty as a construction engineer in the Navy, with the rank of lieutenant commander. Mr. Lynn had been for a time superintendent of the Idaho Maryland Mine at Grass Valley, California.

Mr. Krauskopf served on the campus, in both the Department of Geology and the School of Physical Sciences, but only during the autumn and winter quarters. For the remainder of the year he was engaged in field exploration for tungsten ore deposits on behalf of the United States Geological Survey.

Mr. Page began active duty as associate professor of structural geology in January, after four months in the field for the United States Geological Survey. After the resignation of Mr. Lynn he took over the course in strategic mineral deposits in addition to his usual work.

Mr. Hughes, appointed for only one year, assumed the usual duties of Mr. Muller. He also participated in teaching the class in the geology of oil and coal, after the resignation of Mr. Lynn. Mr. Hughes devoted part of his time to the preparation of a paper on certain aspects of the geology of Humboldt County.

In addition to her duties as curator of paleontology collections, Miss Keen finished for publication two papers on mollusks.

Mr. Stauffer continued his studies of Tertiary paleontology. Before local scientific societies he gave three addresses—one on aerial photography as applied to geology, another on the utilization of geology by the Germans in World Wars I and II, and a third on sedimentary vulcanism. Late in the summer he was called to Washington for special war service in the United States Geological Survey because of his long experience in certain tropical countries.

Mr. Myers was engaged, mostly at the Hopkins Marine Station, in the study of living foraminifera as an aid to the interpretation of the fossil species.

Continuing the policy adopted last year the department issued to its alumni two newsletters about the department and its graduates.

The war has reduced the number of our staff on active duty from seven to two and our graduate students from about fifteen to two. Even elementary classes have shrunk by 60 to 90 per cent. Two members of the staff and many of the students have joined the Armed Forces. Nearly all of the others are employed by the United States Geological Survey, which now has on its roll thirty Stanford graduates—more than any other university in the

Sycheff, studies were continued of the various factors that determine the vitamin A content of shark liver. The problem is part of a larger study, sponsored by the California Division of Fish and Game, designed to accumulate the necessary data for conservation measures for protection of the soupfin shark.

With Randall Rice, work has been continued on the isolation and characterization of liver glycoprotein. The nature of the carbohydrate prosthetic group is under investigation. With Miss Hyla Cook, extensive studies on the adsorption of amino acids on synthetic resins have been carried out. The purpose of this research is to facilitate the quantitative separation of amino acids as an introductory step in the analysis of protein hydrolysates.

Edythelena Tompkins continued some of the work pursued in the previous year by Freda Christianson and completed a study of the sulfhydryl content of serum albumin in the native and denatured state. This work was carried out with the support of the Nutrition Foundation, Inc.

Dr. Gerald Ballou, Dr. Eloise Jameson, Dr. Paul Tompkins, and, for the last two months of the year, Dr. Paul Boyer, and Mr. Funston Lum have collaborated with Professor Luck in studies on serum albumin pursued under contract with the Office of Scientific Research and Development.

Professor Luck continued to serve as editor of the *Annual Review of Biochemistry*, and of the *Annual Review of Physiology*. He also served on the editorial committees of *Nutrition Reviews* and of the *Journal of Biological Chemistry*. He continued as secretary-treasurer of the Pacific Division, American Association for the Advancement of Science, and as chairman of the Committee on Biochemical Nomenclature of the National Research Council.

Professor J. W. McBain and Research Associate Evelyn McBain began the year with twelve collaborators, but additions during the year raised this to seventeen. R. C. Thorburn left in June as Ensign in the United States Navy, and Dr. O. E. Stamberg left at midyear to become professor of agricultural chemistry at the University of Idaho. Soap continues to be the text for fundamental study of the structure and properties of colloids and has been used in the air-driven ultracentrifuge, in surface apparatus, with the spectroscope, turbidity meter, and with X-rays. Professor McBain is serving as official investigator and consultant for three of the government agencies, namely, the National Advisory Council on Aeronautics, the Rubber Reserve Company of the War Production Board, and the National Defense Research Committee. Most of his collaborators are therefore working half-time on these war problems and half-time on their respective fellowships or academic studies.

Dr. Abrams has been investigating the formation of membranes for use with living organisms in the electron microscope. Dr. Dean has been studying diffusion across membranes with special reference to the action of salts. Dr. Robinson has been studying the amount of adsorption in the surface of liquids, including the development of a special apparatus which measures the reflection of polarized light and is sensitive to $1/1000$ of a wave length.

Dr. Ross has continued his study of foaming, including the stability of bubbles, and concentration in surface. He reported on this work at the Sep-

Representation of Primes of Quadratic Forms through the Development of Periods of Reduced Forms."

Various members of the department attended the meetings of the American Mathematical Society and American Mathematical Association in Poughkeepsie (September 8-10), and Stanford (April 24), of the Mathematical Association of America, Northern California Section, in San Francisco (January 30), and the California Mathematics Council at Stanford (December 8-31 and August 11-12).

Professor Szegő continued to serve as a member of the Council of the American Mathematical Society. Also he was a member of the Advisory Committee of the *Transactions of the American Mathematical Society*. He presented a joint paper with Professor E. Hille, Yale University, "On the Complex Zeros of the Bessel Functions" at the Poughkeepsie meeting of the American Mathematical Society. He gave a course at Stanford sponsored by the United States Office of Education in the Engineering, Science, and Management War Training series (September 30-April 28) on "Vector and Tensor Calculus."

Professor Uspensky spoke on an elementary derivation of the sine and cosine series at the meeting of the Northern Section of the Mathematical Association of America held in San Francisco in January. He contributed an article "Sur la méthode de Laplace dans la théorie de l'attraction des ellipsoïdes homogènes" to the memorial volume to be published in honor of Professor Rey Pastor of Buenos Aires.

Professor Polya read a paper, "Analogy, a Source of Discovery," at the meeting of the Mathematical Association of America, Northern California Section, in San Francisco in January. In April he presented a paper at the meeting of the American Mathematical Society held at Stanford University, "Inequalities for the Area of the Ellipsoid." Professor Polya contributed an article "Approximations to the Area of the Ellipsoid" to the memorial volume to be published in honor of Professor Rey Pastor of Buenos Aires.

Professor Spencer presented a joint paper with Dr. R. Salem, Massachusetts Institute of Technology, "The Influence of Gaps on Density of Integers," at the Poughkeepsie meeting of the American Mathematical Society.

Professor Schaeffer was promoted in January to associate professor.

Professor Bacon continued to serve as secretary of the Northern California Section of the Mathematical Association of America and as regional Governor (California and Nevada) of the Association. He also continued to serve as a member of the Subcommittee on Mathematics of the California Committee for the Study of Education. He was a member of the committees on Public Exercises and on Instruction in Statistics. In the Army program at Stanford Professor Bacon served as assistant director, Basic Unit, and also assisted with administrative duties for the president's office.

Dr. Doyle read a paper, "Tensor Theory of Invariants for the Projective Differential Geometry of a Curved Surface," at the April meeting of the American Mathematical Society at Stanford University.

Mr. Rosenbloom accepted an appointment at Brown University as instructor. He left Stanford in February.

The Stanford Mathematics Colloquium was temporarily united with the Seminar in Mathematics. Lectures were given by various members of the

Professor Parks, with the aid of his students, continued his extensive studies on the thermodynamic properties of organic compounds. During the past year attention was focused especially on certain typical hydrocarbons of high molecular weight, which had been prepared in a research project of the American Petroleum Institute at Pennsylvania State College. With Benjamin F. Naylor and Leslie A. McClaine, specific heat measurements between 80° and 300° K. were made on three of these compounds, 11-n-decylheneicosane, 11-phenylheneicosane and 11-cyclohexylheneicosane, by the Nernst method. From such data the molal entropies of these hydrocarbons were then calculated. In another investigation Mr. Naylor determined the heats of combustion of these three hydrocarbons and of 13-phenylpentacosane and 13-cyclohexylpentacosane by the bomb calorimeter method with an uncertainty of only 0.02 to 0.04 per cent. Combination of such combustion values with the preceding entropies then yields the free energies of formation of the hydrocarbons and shows the effects of various substituents, such as the n-decyl radical, the phenyl group, and the cyclohexane ring, upon the stability of long-chain paraffinic compounds. With Mr. McClaine, precise combustion measurements were also carried out on certain polyhydroxy alcohols, such as erythritol, dulcitol, and mannitol, in order to increase the accuracy of the present free energy values for these particular compounds.

Associate Professor Koenig continued his studies, in collaboration with Dolores Bandini, on the surface tension of mercury in equilibrium with solutions of mercurous salts, and with Harold E. Kirkby on the densities of solutions of lauryl sulfonic acid and its salts. He also, with Dolores Bandini, renewed a theoretical study which had lain idle for twelve years, on the calculation of heats of adsorption from surface tension. In addition he made further progress on his projected book on electrochemical thermodynamics.

At the invitation of the Stanford School of Humanities, Professor Koenig contributed a paper entitled "Science and the Humanities" to the conference held in May 1943 under the auspices of that school.

The work of Associate Professor Loring on the chemistry of ribonucleic acids has been continued with the assistance of Fred H. Carpenter, Carlton E. Schwerdt and Paul M. Roll. Mr. Carpenter has essentially completed the problem of the identification of the hydrolysis products formed by the action of crystalline ribonuclease on ribonucleic acid. The four nucleotides, guanylic, adenylic, uridylic, and cytidylic acids, produced by alkaline hydrolysis were isolated and identified after enzymic hydrolysis. As a portion of the original nucleic acid molecule is resistant to the action of ribonuclease, it appears that there are at least two types of linkages present. Mr. Schwerdt has isolated and identified the two pyrimidine nucleotides present in tobacco mosaic nucleic acid. These proved to be identical with the pyrimidine nucleotides found in yeast ribonucleic acid. This was accomplished even though the amount of starting material available was only about 5 gms., in contrast to the amount of 100 gm. which is usually used for such an experiment. Mr. Roll is continuing the work on the chemistry of ribonucleic acid with particular reference to the types of linkages which are hydrolyzed by ribonuclease and to the nature of the ribonuclease-resistant fraction.

In collaboration with Mr. J. G. Pierce, Professor Loring has worked out the growth requirement of three mutant strains of *Neurospora* produced by

Professors Bloch and Staub, though on leave, remained at Stanford during the greater part of the year to conduct an investigation for the Office of Scientific Research and Development of the federal government.

Research Associate Bol was advanced to the rank of research professor and Dr. Chapman to that of assistant professor.

One student majoring in the department received the Bachelor of Arts degree and one the degree of Doctor of Philosophy.

Wartime emphasis upon the value of training in physics was probably the cause of the greatly increased physics enrollments which in the autumn quarter brought 360 students to a general course usually taken by about 100 engineering prospects. This enrollment declined in the following quarters as students were removed to the Armed Services, but the impact of the Army Specialized Training Program reversed this trend abruptly and in the summer quarter the department was instructing a total of 879 students (about 61 in uniform), a figure which may be compared with the ten-year average summer quarter enrollment of 23 students.

Preoccupation with teaching subordinated all researches except those operated under government contracts by Professors Bloch, Staub, Chapman, and Kirkpatrick. Professor Elizabeth Rona of Trinity College, Washington, D.C., visited during the summer quarter and conducted spectroscopic research upon the radium content of submarine soils. Under Professor Kirkpatrick's direction Mr. Howard Kelly continued his investigation of X-ray scattering, and new researches on intensity and polarization of the continuous X-ray spectrum were started by Mr. James McGee and Mr. David Garber. Mr. C. K. Chang completed equipment for the amplification and measurement of the minute electric currents conducted by gases when subject to X-radiation. Members of the Department of Electrical Engineering continued their use of laboratory and shop facilities of this department for Klystron investigations, and conducted measurement of radio signal intensities at the atmospheric electricity hut.

The December 1942 meeting of the American Physical Society, held at the University of California at Los Angeles, was attended by Dr. Chapman and by Professor Kirkpatrick, who also presented papers upon theoretical calculations of the continuous X-ray spectrum and upon prismatic X-ray spectra. Papers by Mr. Burr G. Burbank upon the characteristic X-rays of thorium and by Dr. Weinstock upon the inelastic scattering of slow neutrons appeared in the same program.

In July 1943, this department was host to the American Physical Society at its 256th meeting.

Professor Kirkpatrick continued to serve as associate editor of the *American Journal of Physics* and became a member of the executive committee of the American Association of Physics Teachers. During the spring quarter he gave a refresher course for physics teachers under ESMWT administration.

PAUL KIRKPATRICK
*Professor of Physics and Acting
Head of the Department of Physics*

SCHOOL OF SOCIAL SCIENCES

The Executive Committee consisted of Theodore H. Boggs, Chilton R. Bush, Edwin A. Cottrell (chairman), Paul R. Farnsworth, William S. Hopkins (secretary), John R. Reid, Charles N. Reynolds (adviser of students), Payson J. Treat, and Holbrook Working. During the summer quarter Professor Reid was acting chairman. Rex Francis Harlow served as associate professor of public relations, Gwynne Nettler was acting instructor during the winter quarter, and Mrs. Fay H. Jones continued as secretary of the School.

The members of the various department faculties of the School are engaged in the teaching program which has been inaugurated by the United States Army. This Army Specialized Training Program offers courses in European and Far Eastern Area and Language, personnel psychology, and basic courses including American history which are directed and taught by members of the Social Science staff. Additional members of the School faculty who have been appointed for special work in these courses are Stephen Kuhnle, John Brown Mason, and Virgil Dishongh.

These courses in area and language are generally concerned with a speaking fluency and an understanding of the language of a certain area, and a mastery of its geography, social customs, economic life and history, political organization, ideologies, and practices, and the culture and philosophy of its people. Every department of this School is contributing some personnel to an integration of subject matter from the various fields of knowledge which will do much to assist the Army trainees in a wise administration of foreign occupied and liberated territory and prepare its citizens for a secure future. The integration of subject materials from the various disciplines for a real study indicates an important step forward in our educational methods and one which is bound to continue after the war training has passed.

One hundred and seventy-three students were registered as majors, of whom two took one quarter of graduate work. The Bachelor of Arts degree was granted to 72 students, of whom two graduated with great distinction and four with distinction. Five of the social science graduating seniors were elected to membership in Phi Beta Kappa.

Three courses were offered under the auspices of the School during the year. In the winter quarter the course in "Personal Problems in Modern Society" was repeated, with an enrollment of 73 students; Mr. Gwynne Nettler acted as co-ordinator for the course. In the spring quarter Mr. Harlow offered "Public Relations," in which 13 students were enrolled. "Introduction to Social Problems" was offered by Mr. Lynn during the three quarters, with the following registration: autumn, 34; winter, 32; spring, 29.

A new major in the School was offered during the year in the field of Social Service. There were nine majors who started training in this two-year course.

The title of the executive of the School has been changed from Chairman to Dean, to take effect in the next academic year.

EDWIN ANGELL COTTRELL
Chairman of the Executive Committee

ECONOMICS

The staff consisted of Theodore Harding Boggs, John Bennet Canning,* Daniel Fagan, Bernard Francis Haley,* Eliot Jones, Richard Tracy Piere, Charles Nathan Reynolds, and Edward Stone Shaw,* professors; Walter Greenwood Beach (summer quarter), acting professor; Merrill Kelley Nett, Karl Brandt, Vladimir P. Timoshenko, and Holbrook Working, professors, Food Research Institute; William Stephen Hopkins and Wilson Len Wallis,* associate professors; Joel Van Meter Berreman,* Karl Franz de, and Herbert Goldhamer,* assistant professors; Paul Wallin, acting assistant professor; Roy William Jastram, Gault Wellington Lynn, and Maurice Moonitz, instructors; Millard Walter Hastay (spring and summer quarters), Ralph Ira Thayer (summer quarter), and Gwynne Nettler (winter quarter), acting instructors; and Ruth Thayer Wilson (spring quarter), tutor.

The following graduate students acted as teaching assistants in the elementary courses in accounting, economics, and sociology: Clyde James Riley, Virgil Bruce Dishongh, Millard Walter Hastay, Kenneth Andrew Hanson, Chalmers Acheson MacIlvaine, Gwynne Nettler, and Ralph Ira Thayer.

The members of the department taught in their several classes 2,590 students, as compared with 3,586 the year before. For the three regular quarters the average number of students per quarter per member of the teaching staff was 66, as compared with 75 in 1941-42. During the summer the total number of students receiving instruction was 200, or an average of 28 per member of the staff, as compared with an aggregate of 397 and an average of 49 in 1941-42.

The enrolment of major students was as follows: autumn quarter, graduates 11, undergraduates 154; winter quarter, graduates 8, undergraduates 150; spring quarter, graduates 11, undergraduates 103; summer quarter, graduates 6, undergraduates 28.

The Bachelor of Arts degree was awarded to 72 students in economics, 6 in economics-accountancy, and to 10 in sociology. The degree of Bachelor of Arts was awarded to 2 students in sociology.

The exigencies of the war have necessitated many adjustments within the department beyond those that have been previously reported. By the end of this year eight members of the staff were on leave for service in civil emergencies concerned with the war effort or for service in the Armed Forces. The remaining members of the staff have been called upon to engage in a variety of activities connected with the war emergency. Nevertheless it has been possible to maintain a fairly adequate curriculum in economics and sociology by concentrating on those courses for which the present demand is greatest and by reducing the number of courses repeated during the year.

In January the department established a six-quarter program in statistics to meet the need of students expecting to go into the Armed Forces or into war industries. Mr. Boggs is the vocational adviser of this program.

The department was represented at the annual meetings of the American

* Absent on leave, 1942-43.

Economic Association, held in Washington, D.C., in January 1943, by Messrs. Haley, Shaw, and Wallis. Mr. Haley served as chairman of one of the sections. Mr. Wallis attended the annual meeting of the American Statistical Association, held at the same place and time. At a joint meeting of the two associations he participated in a panel discussion of "Price Control and Rationing." In May he attended a meeting of the Institute of Mathematical Statistics which was held in New York City. Mr. Jastram attended a meeting during November 1942 of the Subcommittee on Price Policies of the Pacific Coast Regional Committee of the Social Science Research Council. He was appointed chairman of the subcommittee and served in that capacity until May 1943.

The members of the department have been called upon with increasing frequency to describe and explain to public groups those aspects of current economic life which fall within their respective specialties. Mr. Boggs addressed the Palo Alto Free-World Forum on "International Economic Problems and World Collaboration" in October 1942; The American Association of University Women (Palo Alto branch) on "The War, Economic Issues, and the Peace" in November; the San Francisco board of the League of Women Voters on "The Reciprocal Trade Agreements Program" in March 1943; and the Palo Alto Free-World Forum on "The Trade Agreements and Their Relation to Postwar Settlements" in May. Mr. Bode spoke to the San Jose Adult Center Public Forum on "The Economic Situation in German Europe in the Fourth Year of War" in May; and to the World Affairs Club of Stanford on "The Keynes Plan for Postwar Monetary Arrangements" in July. Mr. Canning gave an address on "The Food Situation" at the University of Illinois in November 1942. Mr. Fagan addressed the San Jose Adult Center Public Forum on "Wartime Tax Problems" in February 1943. Mr. Hopkins was a lecturer and panel member at the Stanford Alumni Conference held in San Francisco in February and addressed the San Jose Adult Center Public Forum on "Labor's Share in the War Effort" in the same month. Mr. Jones spoke to the Twenty-Thirty Club of Albuquerque, N.M., on "Victory through Air Power" in the late summer of 1942 and to the Palo Alto Veterans of Foreign Wars on "War—1942 Style" in November.

The following articles on economic considerations growing out of the war were published by members of the staff: By Mr. Boggs, "Economic Problems Growing Out of the War," *Frontiers of Democracy*. By Mr. Bode, "The Acceptance of Defeat in Germany," *Journal of Abnormal and Social Psychology*; "Plan Analysis and Process Analysis," *American Economic Review*; and "Economic Aspects of Morale in Nazi Germany," *Proceedings of the Pacific Coast Economic Association*. By Mr. Wallis, "How to Ration Consumers' Goods and Control Their Prices," *American Economic Review*; "Compounding Probabilities from Independent Significance Tests," *Econometrica*; "The Temporal Stability of Consumption Patterns," *Review of Economic Statistics*; "Price Control and Rationing," *American Economic Review*; and "Time Series Significance Tests Based on Signs of Differences," *Journal of the American Statistical Association*.

Mr. Fagan prepared a monograph for Governor Warren's Citizen Tax

committee entitled "Some Suggestions Concerning the Use of California's Unearmarked Surplus Funds." He has also prepared two reports for the United States Treasury Department: "The Place of a Federal Sales Tax in War Finance" and "A Proposal for Personal Net Income Taxation and Deferred Spending with Collection at Source on a Pay-as-You-Go Basis."

The members of the staff who are on leave as a consequence of the war served in the following capacities: Mr. Canning, who was on leave throughout the year, has been a consultant in the Office of the Director, Food Distribution Administration, Washington, D.C. Mr. Haley left the San Francisco regional office of the Office of Price Administration during September 1942 to become director of Textile, Leather, and Apparel Price Division, OPA, Washington, D.C. He remained in this capacity until July of this year. He is now directing economic studies for the Department of State. Mr. Shaw, who has been on leave since August 1942, was the assistant branch chief of the Income and Demand Branch, Research Division, Office of Price Administration, Washington, D.C., from August through October. From then until July 1943 he was head economist and chief of the Economic Analysis Branch, Textile, Leather, and Apparel Price Division, OPA, Washington, D.C. In July he was commissioned a lieutenant (j.g.) in the United States Naval Reserve and has been stationed at the Alameda Base. Since July 1942, when he took leave from the department, Mr. Wallis has been director of research of the Statistical Research Group. This is a unit of the National Research Committee's Panel on Applied Mathematics and is engaged in secret research concerning tactical and technical matters that were referred to it by the Army and the Navy. During May of this year Mr. Jastram was granted leave in order that he might serve as a special consultant with the Army Air Forces. He was immediately sent overseas. His work, like that of Mr. Wallis, is secret in nature and cannot be reported.

A number of the active members of the staff accepted special wartime assignments. Mr. Fagan has served throughout the year as a consulting expert for the United States Treasury Department. In this capacity he has made special studies in taxation problems for the Treasury. Three reports have already been submitted, the most recent of which is on the economic effects of the federal corporation net income tax. Mr. Hopkins was in charge of project employment for the Western Regional Office, United States War Relocation Authority, from August to December 1942. By scheduling his teaching for the first three days of the week, he was able to spend the latter three in San Francisco. Simultaneously, he served as special arbitrator for the National War Labor Board. In January 1943 he was appointed head consultant of the Tenth Regional War Labor Board, with headquarters in San Francisco, and has continued to serve in this capacity. During the summer quarter he assumed the additional responsibilities of associate director of wage stabilization for the same organization. In March he was appointed to membership on the Industrial Committee, United States Wage and Hour Division, attending meetings of the committee in New York City during March and May. Mr. Lynn has been associated with the San Francisco office of the Office of Price Administration since January.

Other war-connected activities of the members of the staff were as fol-

United States. Since geology offers only limited professional opportunity for women, there has been no increase in their number as major students in the department.

The usual scientific meetings for geologists in the Bay district were canceled, except a single meeting of the LeConte Geological Club at Stanford during the autumn quarter. For a similar reason members of the staff gave up their custom of attending meetings of the national societies in the East. Outside lectures were correspondingly scarce, but one was given by Dr. Paul D. Krynine of Pennsylvania, and another by Dr. L. G. Hertlein of San Francisco.

Nearly all the normal research work of members of the staff was curtailed, deferred, or converted to special needs of the government in wartime. Through the use of its rooms and equipment the department rendered service to Army units stationed on the campus. In addition, Mr. Blackwelder, Mr. Schenck, and Mr. Willis took part in instructing soldiers in the geography of Europe.

Thus far the value of the science of geology in wartime has been only partly appreciated by the government. Hence the demand for young geologists was at first limited to those who had been trained in mining, petroleum, or engineering geology. Most of these indeed were used in comparatively low-grade work, such as the construction of camps and airports. Lately there has been noticed a tendency to realize that geologists can render more important service with their knowledge of the distribution of economic resources in foreign countries, their ability to find new supplies of metallic ores and petroleum, their understanding of the occurrence and control of underground water, and many other problems of importance in the war.

ELIOT BLACKWELDER
Executive Head

MATHEMATICS

The department staff for the academic year consisted of Gabor Szegő, James Victor Uspensky, professors; George Polya, Albert C. Schaeffer, Donald C. Spencer, associate professors; Harold Maile Bacon, assistant professor; Thomas C. Doyle, John G. Herriot, Marjorie Ley Hoffman (summer quarter), Mary Virginia Sunseri (summer quarter), instructors; Samuel A. Francis, Marjorie Ley Hoffman, Madeline Johnsen, O. L. Kenfield, Edmund V. Laitone, Kathryn A. Morgan, Paul C. Rosenbloom, Mary V. Sunseri, Hazel A. Vernier, Fay L. Younkin, assistants in instruction; Virginia S. Boles, secretary-librarian and student adviser in the department.

The degree of Doctor of Philosophy was conferred upon Carl Douglas Olds with the dissertation "On the Number of Representations of the Space of an Integer as the Sum of an Odd Number of Squares."

The degree of Master of Arts was conferred upon Kathryn Anne Morgan with the thesis "Modification and Expansion of Göpel's Method of Obtaining

enrollment of major students was as follows: autumn quarter, graduates 3, undergraduates 14; winter quarter, graduates 3, undergraduates 9; spring quarter, graduates 3, undergraduates 7; summer quarter, graduates 3, undergraduates 4.

The Bachelor of Arts Degree was awarded to 10 students. The degree of Master of Arts was awarded to two students in sociology: Madison John McKinney and Carl Nathan Reynolds.

Beginning with the winter quarter, the division established a six-quarter social service program to complement the pre-professional program now offered in the School of Social Sciences. The division's program is provided for those students who wish, in view of the war emergency, to enter social service work at the earliest practicable time. Mr. LaPiere has served as vocational adviser for such students.

In June 1943, Mr. Reynolds attended the three-day annual meeting of the Western Farm Economics Association, held in Berkeley. Mr. Reynolds has taken a very active part in the work of a committee, known as the Committee for Problem No. 24 of the Central Valley Project Studies, which was set up under the Bureau of Reclamation of the Department of Interior to study the effects of the construction of Shasta and Friant dams on the pattern of life in the central valleys of California. He has attended numerous meetings of this committee since his appointment to it in October 1942. In addition, he has served on two subcommittees, that on social patterns and that on population. As an outgrowth of his membership on the latter, he took a leave of absence from the University for the summer quarter in order that he might accept appointment as senior social science analyst in the Division of Farm Population and Rural Welfare, Bureau of Agricultural Economics, United States Department of Agriculture. In this capacity he has been conducting a study of the population of California as related to the Central Valley project.

In December 1942, Mr. LaPiere attended in an advisory capacity the annual conference of the Los Angeles County Dental Society, held at Los Angeles. At the evening meeting he addressed the society on "The Future of the Professional Man." In November he addressed the Plant and Building Protection School, sponsored by the city of San Jose, on "Panic Prevention." For the Office of Civilian Defense he gave, in May 1943, a radio address over the Columbia Broadcasting Company network on the subject, "Disaster Preparedness." This talk was subsequently printed and distributed to the general public by the OCD.

This year Mr. LaPiere was a member of the nominating committee of the American Sociological Society and the Pacific Coast representative on the membership committee of the same organization. He has continued as associate editor of the *Sociological Review*.

As additions to his regular teaching duties and in response to the urgent need for qualified instructors, Mr. Reynolds taught a course in mathematics in the Mathematics Department during the winter quarter and undertook three additional courses during the spring quarter—one in mathematics for the Mathematics Department, one in the same field for the STAR program, and a course in plane surveying for the advanced Army engineers.

Mr. LaPiere served throughout the year as an associate member of the staff of the War Department Civilian Protection School at Stanford and has acted in the capacity of consultant on problems of collective psychology growing out of the war emergency. He prepared a teaching manual on "The Prevention of Gas Panic" for use by the Army in its civilian training program. During the year he published the following articles: "A Sociologist Looks at the Future," *Journal of the Southern California State Dental Association*; and "Control of Wartime Panic," *Fire Station Digest*.

In October 1942, Mr. Goldhamer was granted leave from the University to enter the Armed Services. For some months he was stationed in the psychological testing center at the Presidio of Monterey. In May of this year he entered the Officer Training School at Fort Washington, Maryland, and in August he was commissioned a second lieutenant. Before entering the Army, he had completed an article on "Social Clubs and Fraternal Societies," which subsequently appeared as one chapter of *Development of Collective Enterprise*, a volume published under the editorship of Seba Eldridge.

Mr. Wallin was granted a leave from the University in June 1943 to enter the Army. Previous to this time he had been engaged in a study of marital adjustments in collaboration with E. W. Burgess of the University of Chicago. The study was to have been published as a monograph later in the year, but it is possible that completion of the study will be delayed until after the war.

Mr. Wallin has been appointed an assistant professor, on leave, for 1943-44. Florence Jewell Buehler has been appointed lecturer for the autumn quarter. She will direct field training in social work for students taking the six-quarter social service program of the division and those taking the pre-professional program offered by the School of Social Sciences. Mr. Nettles was granted a Switzer fellowship; the Rosenberg fellowship previously granted to Mr. Robert Cobb Myers was extended over into the postwar period so that he might continue to work in a civilian capacity for the Army.

RICHARD TRACY LAPIERE
Acting Executive Head
Summer Quarter

HISTORY

The resident members of the faculty for 1942-43 were Thomas Andrew Bailey, Carl Fremont Brand, Harold Henry Fisher, Ralph Haswell Lutz, Edgar Eugene Robinson (executive head), Maxwell Hicks Savelle, Payson Jackson Treat, Lynn Townsend White, Jr., professors; Charles Albro Barker, Harold Whitman Bradley, associate professors; Arthur Franklin Zimmerman, acting professor; George Harmon Knoles, acting assistant professor; Edward Arthur White, lecturer;* Irwin Abrams, Albert Howard Clodius,† Matthew Bowman Evans, Jr., Henry Forbes McCreery, II,‡

* Winter, spring, and summer quarters.

† Autumn quarter.

‡ Autumn, winter, and spring quarters.

Henry Miller Madden,† Dayton Phillips, Charles Craven Scott,† Rixford Kinney Snyder,§ instructors; Jere Clemens King,¶ Alfred Owen Ulph,* acting instructors. Professor David Harris and Associate Professor Merrill Spalding were on leave throughout the year. Professors Brand, Treat, and Robinson and Assistant Professor Knoles were on duty in the summer quarter, as were also Dr. White and Instructors Abrams, Evans, Phillips, and Ulph. Professor Bradley has served as secretary of the faculty throughout the year.

Miss Lois Ruth Bailey served as secretary of the department through the autumn and winter quarters. Mrs. Celeste C. McKee was appointed for spring and summer quarters, and holds appointment for the coming year, as does Mrs. Ruth Pedersen who has served as secretary of the course in Western Civilization. Assistants in the introductory courses in one or more quarters were Malcolm Herbert Moule, Charles Floyd Delzell, Mitchell William Kerr.

Of course, the work of the department has been greatly affected by the conditions of war. There has been a reduced enrolment in classes, and a reduction in majors. How far the reduction in majors is due to shifts in immediate interest of the students, and how far it is due to changes in schools and departments within the University cannot be determined. The fact that the department as a major field of concentration is considered within both the School of Humanities and the School of Social Sciences has been a source of confusion to students as well as faculty. It is evident that there are a great number of undergraduate students who wish to major in history as a general field for liberal education. Their needs are met—as in previous years—by the four-year program in history, including seminars and independent study. During the past year the small number who have been able to undertake such work have been directed by our faculty, although they have been greatly reduced in number. With one exception, the basic courses have all been given, including the work in Latin American history, which was handled this year by a visitor, Dr. Arthur Franklin Zimmerman, of the State Teachers College of Colorado. There have been numerous and frequent changes in the faculty of the course in Western Civilization, Instructors McCreery and Clodius going directly into the Army, Instructor Snyder into teaching service in the Navy, Instructor Scott into the Red Cross service as Assistant Field Director, and Instructor Madden to the Navy Area School at Columbia University. Absent on leave, Professor Merrill Spalding has been attached to the San Francisco Office of Strategic Services, and Professor David Harris has served in research study of the Department of State in Washington, D.C.

The majors were distributed as follows:

	Autumn	Winter	Spring	Summer
Graduates	8	7	6	12
Undergraduates	49	53	49	18

† Autumn and winter quarters.

¶ Spring quarter.

The class enrolment in courses in history was as follows:

History of Western Civilization.....	2,428
History of American Civilization.....	174
Introductory lecture courses	562
Advanced lecture courses	395
Introductory seminars	37
Senior seminars	41
Graduate seminars	6
Individual reading	57
Independent study (University plan)	12
Graduate research	14

At Commencement in June 1943, twenty-two were awarded the degree of Bachelor of Arts in History, five with distinction, and five with great distinction. Six received the degree of Master of Arts, with thesis titles as follows: Elizabeth Jane Crandall, "The United States and the Lima Conference of 1938"; Dean Russell Cresap, "The Revision of the Treaties of 1839 at the Paris Peace Conference"; Charles Floyd Delzell, "The Military Occupation of Belgium, 1914-1918"; Raymond Muse, "The Constitution of Provincial Massachusetts"; Howard Henri Quint, "The Bellamy Nationalist Movement 1888-1894"; Ralph Merton VanBrocklin, "The United States and the Armed Merchant Ship Issue, 1914-1918." Matthew Bowman Evans, Jr., and Alice Madeline Rose were awarded the Ph.D. degree. Dr. Evans' dissertation title was "The Fox-North Coalition of 1783 and the End of the Eighteenth-Century Political System in England," and Dr. Rose's dissertation title, "The Rise of California Insurgency: Origins of the League of Lincoln-Roosevelt Republican Clubs, 1900-1907."

The course in Western Civilization, directed by Professor Savelle, as chairman of the staff of its faculty, has been offered in the four quarters, and has required an unusual amount of administration owing to the fact that new students have entered each quarter, and thus History 10, 11, 12 have been needed in each quarter. The reading room of the course in Western Civilization was in general charge of Instructor Madden in autumn quarter, and of Assistant Professor George Knoles for the balance of this year, including the summer; assistants in direct charge were Mrs. Harold Rose, Miss Theresa Gay, Mrs. Roy Palmer, and Miss Helen Savory.

American Civilization has been offered as a sophomore course in autumn, winter, and spring quarters, and has appeared to meet the need of a considerable number of students including those intending to major in the School of Humanities.

Independent study has been continued in the course, Western Civilization, although the changing personnel of the faculty and the fact that "new" students entered each quarter thus limited the number that could be properly handled in this intensive and personal work. The inclusion of less mature students as entering freshmen in the University also limited the number available for this type of instruction. All instructors participated in this work. The usual methods—including oral examinations—have been continued. Independent study in Upper Division work in history has been offered by all members of the department. The programs "in History" on the University plan of Independent Study are treated elsewhere (in report of University Committee on Independent Study).

Members of the department have been called into many kinds of service, professional and otherwise. As usual members have given much service on university committees, both the usual committees and "war" committees. Likewise, there has been continued service in professional societies and for professional journals. Public service has called increasingly for lectures, addresses, articles, and radio presentation. The general statement may be made that historians, as others, have been asked to do more, and have done. For example, Dr. Treat has served as Consultant for the Office of Strategic Services. Research has gone forward, and many plans have been made for increased activity when the greater opportunity again appears. Among the programs of research are the following: Professor Brand on "British Labor and British Foreign Policy," and Professor Lutz on "A Documentary History of the Organization of American Relief in Europe." (A list of the books, monographs, papers, and reviews published during the year appears elsewhere in this report.)

More important activities of the year include the following: Dr. Abrams served as a member of the faculty of the Institute of International Relations at Mills College, and was a delegate to the Hazen Conference on Student Guidance and Counseling at San Rafael. At Berkeley, he spoke on "The Nature of the Present Crisis" before the annual conference of Northern California Congregationalist Pilgrim Fellowship, and at San Francisco on "The Tasks of World Reconstruction," as part of a World Problems Lecture Series of the Jewish Community Center. Professor Bailey spoke at the University of California on "Woodrow Wilson and the Peace that failed." He also addressed a Stanford audience in a panel discussion in the Tuesday evening series on "The Foreign Policies of the United States." Professor Barker is serving this year as chairman of the Dunning Prize Committee of the American Historical Association. Professor Bradley participated in a panel discussion at the alumni conference in San Francisco, and in the spring addressed a Pomona College group on Hawaii. He has continued as a member of the board of editors of the *Pacific Historical Review*. He attended two Huntington Library Conferences on Regional History and a meeting of the Mississippi Valley Historical Association where he read a paper entitled "The Political Thinking of George Washington." He has been appointed a member of a committee of the Mississippi Valley Historical Association to study the teaching of United States history in the schools and colleges. This committee is working with a committee of the American Historical Association. Professor Brand lectured on British Foreign Policy in the University Tuesday evening series.

Professor Fisher was speaker for the Council on Foreign Relations at Des Moines, Omaha, Denver, Salt Lake City, Seattle, Portland, and San Francisco. He served as a member of the editorial boards of the *Slavonic and Eastern European Review* and of the *Russian Review*. He also was a member of the Polish Institute of Arts and Sciences, a Conference on Area and Language Schools, held in Chicago, March 19-21, 1943, under the auspices of the Provost Marshal General's office, and of a Conference on Slavic Studies, called by the Rockefeller Foundation in New York, March 7-28, 1943. Professor Knoles has prepared reports upon the Stanford Con-

ference of Teachers of American History which have been printed in the *New York Times* and in *School and Society*. He attended the annual meeting of the Mississippi Valley Historical Association and read a paper, "The Religious Ideas of Thomas Jefferson." He has served on the Council of the Pacific Coast Branch of the American Historical Association.

Professor Lutz attended the Institute of World Affairs at Riverside as a delegate representing the University, and also attended conferences called by the War Department at Chicago, Charlottesville, and Washington. His public addresses have been numerous, including talks before the San Mateo High School, Annapolis Alumni at Treasure Island, Stanford Alumni Conference, the Palo Alto Kiwanis Club, and the English Speaking Union, San Francisco. He was the commencement speaker at San Jose State College and delivered addresses over KGO and KLX, besides participating in a language symposium and a forum discussion. Professor Lutz is also a member of the San Francisco Committee of the Foreign Policy Association. Another important activity has been his service as chairman of the Committee on the Education of Returning Nationals. He has been appointed director of the proposed Civil Affairs Specialists' Training Program—Europe, to which he has been giving full time since the first of August.

Professor Robinson has directed the four conferences on the Teaching of American History, held at the University during the past year, and has directed the research projects of the newly established Institute of American History. He is a member of the Research Council of the Commonwealth Club of California which authorized a study of legislative problems of California and launched a study of population shifts in California. He is a life member of the Board of Governors of the Commonwealth Club, a member of the Board of Directors of International Center and of Pacific House, and of the Executive Committee of the Council on Foreign Relations in San Francisco. He addressed teachers' institutes in San Rafael and San Jose. He spoke on "America's Contribution" at a War and Peace Conference in San Francisco. Professor Savelle addressed the California Historical Society on the subject, "Cabrillo and California, 1542-1942," and the San Francisco chapter of the Colonial Dames Resident in California on "Juan Rodriguez Cabrillo." He has also served as chairman of the University Advisory Committee on *Who's Who in Latin America*, and as a member of the Committee on War and Post-War Emergency of the Progressive Education Association. During the summer, he has been in residence in Mexico City, and while there was of assistance in the initial work on the forthcoming new edition of *Who's Who in Latin America*. Professor White addressed the Stanford Humanities Conference on "The Totalitarian Tendencies in American Life."

Professor Zimmerman, who was Acting Professor in Latin American history for autumn, winter, and spring quarters, gave the following public addresses during the academic year: "Latin American Collaboration in the War and the Peace," before the Institute of World Affairs at Riverside, California; "Bases for Inter-American Relations," before the Tokalon Club of San Jose; "Rediscovering Latin America," at a meeting of the Women's Society of Christian Service of the Methodist Church of Palo Alto; "Latin

America and the Peace," before the Business and Professional Women of Palo Alto; "Relations with South America," San Jose Rotary Club, and "The Price of the Best," delivered as a Memorial Day address at the Methodist Church of Palo Alto.

Dr. Alice Rose served as associate in charge of the Borel Collection on California history and as associate of the Institute of American History. Miss Rosemary Goodwin was awarded the prize in the Colonial Dames essay contest for her paper, "Samuel Johnson, First President of King's College." This is the twenty-first award. Once more we are indebted to Mr. and Mrs. James T. Weter and daughter Winifred for their generosity in again increasing their gift to the University for the continuance of the Weter Award in History (Independent Study).

On January 1 announcement was made of the establishment within the department of an Institute of American History. A fund has been provided by San Francisco business and professional men to cover the initial work of two years and plans for a five-year program of research and publication formulated. The advisory board consists of Professors Bailey, Barker, Bradley, Knoles, and Savelle, and Professor Robinson has been named director. During the year, the Institute sponsored four conferences on American history—two of them of teachers in the four-year colleges and universities of California, one of teachers from the public junior colleges, and one of thirty teachers of American history in representative high schools. Altogether, approximately one hundred individuals participated, coming from some seventy institutions in every section of the state. The discussion and action of these conferences have been much publicized and the proceedings are to be printed.

Although many members of the department have participated in the work for the various Army units, that offered in American history for Basic Engineers has been the most important. Professor Bailey has been named assistant director in charge of these courses, and he and Professor Barker began instruction of the first units in July. Plans have been made for the participation of other members of the faculty as the need increases in October and January.

At the opening of the year the department faculty considered at length the status of the department within the changed structure of the University—considering in particular the developing plans of the School of Humanities and of the School of Social Sciences and the fact that, by action of the Board of Trustees, hereafter "the bachelor of arts degree will be granted by schools and not by departments."

Pointing out that the Department of History (1) offers a four-year program in general education beginning with Western Civilization required of all students who commence their college work at Stanford, (2) has had for many years a detailed plan for the guidance of majors in history as a broad field of general education, and (3) has developed fields for individual study in history during the past seventeen years, the members of the faculty requested of the Chancellor the following action: (a) that a School of History be established, to comprise the present members of the Department of History and such other members of the faculty as may later be designated; (b)

that the faculty of the school be granted the power to prescribe curricula and recommend for degrees, both graduate and undergraduate; (c) that the faculty be charged with offering courses in history required by the University or any school thereof; (d) that the faculty be charged with the development of co-operative work with the staff of the Hoover Library in the fields of historical research that fall within the library's scope.

The adoption of this plan was urged by the department faculty, and supplementary statements supporting and explaining the need were made by the executive head in November, in January, and in April and May. It is our understanding that the plan is now before the academic committee of the Board of Trustees. The developments of the past year have emphasized the soundness of the plan and the need of such a presentation at this particular time. The need is seen in the great interest expressed outside the University in the work of the Institute of American History, in the evident call for more teachers of history for the high schools and junior colleges, in the call for "history" in plans of courses for men in the Armed Services, most of all in the growing demand for the use of "history" in general education in postwar planning and in graduate study.

Acting Assistant Professor George H. Knoles has been named assistant professor with the opening of the year 1943-44. Dr. Edward White continues as lecturer, giving his time to work in Western Civilization. Instructors Abrams, Evans, King, Phillips, and Ulph have been reappointed. Mr. Robert Grinnell, who is completing his work at Yale for the doctorate, has been appointed instructor. All of these men are assigned to work in the course in Western Civilization.

Professor Yamato Kihashi, who became a member of the Stanford faculty in 1913 and professor of Japanese history and government in 1930, retires at the end of this year and becomes professor emeritus. Professor Lynn T. White, a graduate of this department and for the past six years a member of its faculty, has resigned to accept election as president of Mills College. Appointments in their fields of research and teaching and in that of the late Professor Martin have yet to be made.

EDGAR EUGENE ROBINSON
Margaret Byrne Professor of
American History and
Executive Head

DIVISION OF JOURNALISM

The staff of the Division of Journalism for 1942-43 consisted of Chilton R. Bush, professor; Clifford F. Weigle, associate professor; Thomas M. Newell, instructor (autumn); Edward J. Demson (spring), James C. Nute (winter and spring), and Herbert K. Reynolds (winter), lecturers.

Class enrolment, exclusive of practice courses, was 309, and the number of Bachelor's degrees granted was 16. This represents a decline of about 30 per cent.

Although most of the graduates were women, the demand for their services to replace men on metropolitan newspapers and in press associations greatly exceeded the number available.

Of male alumni of the last ten years who went into military service, more than 90 per cent were reported as having received officers' commissions.

The Division sponsored the nineteenth annual convention of the Central California Scholastic Press Association in October, and, with the California Newspaper Publishers' Association, the sixth Midyear Editors' Conference in June.

Mr. Bush continued as president of the American Association of Schools and Departments of Journalism. He was a member of the following committees: Executive Committee of the School of Social Sciences; Athletics (Men); University Services; the Stanford Fund's Committee on Annual Appeal; the Stanford Associates' Committee on Publications; the Alumni Association's Publications Committee (chairman); and a special Committee on Summer Quarter.

In the spring (with Mr. Weigle) he conducted two reader-interest surveys for the *San Francisco Chronicle*, gave four lectures in the European Area and Language School, and addressed the Alumni Conference in Los Angeles. On the request of the National Committee on Research of the American Association of Schools and Departments of Journalism, he prepared (with Mr. Weigle) a *Manual of Measurement Techniques in Journalism and Advertising*, which was to be ready for the printer next year.

He was director of publicity and, during summer quarter, acted as temporary director of the Alumni Association.

Mr. Weigle was appointed to the Board of Editors of the *Journalism Quarterly* and as national vice-president of Alpha Delta Sigma, professional advertising society. He was elected to membership on the Executive Committee of the Stanford chapter of Phi Beta Kappa and served on the following committees: Radio; a special Stanford Associates committee; and a Committee on Permanent Organization of a Northern California Council on Human Relations in Forestry. He addressed the Midyear Editors' Conference, the Central California Scholastic Press Association, and, during Newspaper Week, the Alameda Kiwanis Club.

Mr. Newell resigned in autumn quarter after receiving a commission in the United States Naval Reserve.

CHILTON R. BUSH
Professor of Journalism

PHILOSOPHY

The staff of the department for the academic year 1942-43 consisted of the following: Harold Chapman Brown, professor and executive head of the department; Henry Lanz, professor (part-time in philosophy); John Robert Reid, associate professor; and John Leland Mothershead, Jr., assistant professor.

The total registration for all courses was 368, and the number of students registered in each of the four quarters was, respectively, 96, 98, 76, 98.

During the year, Professor Brown wrote an essay on "Ways and Means: A Study in Democratic War Strategy" for the meeting of the Pacific Division of the American Philosophical Association, and contributed a chapter on Russell's theory of knowledge to a forthcoming volume dealing with various aspects of his philosophy. Professor Reid read a paper on "Criteria, Standards, and Norms" before the meeting of the Pacific Division of the American Philosophical Association; addressed the Stanford Psychology Seminar on "Value Theory and Psychology"; had published an article, "Definitional Rules: Their Nature, Status, and Normative Function," in the *Journal of Philosophy*; had accepted for publication later this year two papers which will appear in *The Philosophy of Science and Mind*; and was awarded a Guggenheim Fellowship. Professor Mothershead read a paper on "Philosophy Is Practical" before the Stanford Philosophy Club, and is doing research—the results of which will be published later—on the problems of ethics.

Naturally, the war has reduced the enrolment in philosophy courses, the pressure of other work—which for the time being is reasonably considered more urgent—making it not feasible for many students to elect such courses. It is gratifying to be able to report, however, that this inevitable reduction is not as great at Stanford as at many other universities. Indeed, it seems fair to say that the total impact of the war has been to open the eyes of many intelligent students to the ever-present need for that free and critical examination of life—its meanings, values, and goals—without which, as Socrates taught, life is not worth living—nor, we might add, is any particular way of life *known* to be worth defending. It is the vital business of philosophy to clarify, to explain, and to improve what we are fighting to save. The success of philosophy in this undertaking will be the measure of its immediate value and the best sign of its enduring importance in education.

JOHN R. REID
Acting Executive Head

POLITICAL SCIENCE

The staff consisted of Edwin Angell Cottrell, Thomas S. Barclay, Philip W. Buck, Charles Fairman, and Graham Stuart, professors; Rudolf Holsti (Geneva, Switzerland), acting professor; John T. Salter (University of Wisconsin), acting associate professor; John W. Masland, assistant professor; William R. Jeffrey and Samuel G. Rich, assistants in instruction; and Peter Bachrach, Lawrence R. Grannis, Harold E. Hall, Barbara Horner, Clarence E. Thurber, Tina Varanini, and Lorraine L. Wickstrom, research assistants. Mrs. Fay H. Jones continued as secretary of the department and of the School of Social Sciences, and Mrs. Mary J. Mead was assistant secretary.

The total number of students registered in political science courses was 1,327. There were 131 major students, 21 graduates, and 110 undergraduates. One student was registered under the Independent Study Plan in political science, while eleven students were registered under the plan in Lower Division courses, five of them for two quarters. There were 17 students registered for directed reading, one for two quarters, and 6 graduate students took thesis work. A total of 69 degrees were granted: Doctor of Philosophy, 2; Master of Arts, 6; and Bachelor of Arts, 61 (one of the latter being under the Independent Study Plan). Three seniors graduated with great distinction, 11 with distinction, and 11 were elected to membership in the Phi Beta Kappa Society. The titles of the doctoral dissertations were: James Eldon Fields, "Neo-Marxian Theories of Peace and War," and Boyd Archer Martin, "The Direct Primary in Idaho." The Masters' theses had the following titles: Harold Emil Hall, "Nazi Penetration into South America," Theodore Harder, "City Managership in Santa Barbara," Marie-Christine de Lempicka, "The Post-War World: A Plan for Post-War Reconstruction," Alba Blanche Pichetto, "Recruitment Media for Public Service," Samuel Grover Rich, Jr., "Toward Pan American Peace: The Inter-American Conference for the Maintenance of Peace, Buenos Aires, 1936," and Virginia Voorheis Wickersham, "Interference in American Foreign Affairs by Unauthorized American Citizens."

Mr. Stuart went to Los Angeles in September, where he spoke before both the American Institute of Banking and the American Association of University Women. He spent the autumn quarter in Washington, D.C., as head economic analyst of the American Hemisphere Division of the Board of Economic Warfare, and after his return to the campus he acted as consultant for the same organization. He participated in the Institute of Inter-American Affairs at Occidental College in January and a Conference on Postwar International Law and Organization in San Francisco in April, and helped to organize and was chairman of the Institute of Interamerican Affairs in July in San Francisco. During the spring and summer he directed the course in Modern History and Contemporary World Affairs in the European Area and Language Course of the Army Specialized Training Program, and during the summer quarter he was also acting head of the department and in charge of a 9L or independent section of the Army program. During the year he gave addresses at the American University in Washington, D.C., on the University Tuesday evening series, at the Teachers Institute in Fresno, at the Stanford Alumni Conference in Los Angeles, on a program in San Francisco honoring Greece, at a Forum in Los Gatos, before the Federation of Women's Clubs in Los Angeles, at the Free World Forum in Palo Alto, before the state convention of the Federation of Women's Clubs in Fresno, and at the Casa Pan American at Mills College. He continued as a director of the Hoover War Library and editor of Stanford Books in World Politics for the Stanford University Press, editing Richard Van Alstyne's *American Diplomacy in Action*, to be published in the near future.

Mr. Barclay was on sabbatical leave during the academic year. He continued to serve on the Alien Enemy Hearing Board for California, and, in

July 1943, was appointed by the Attorney General as a member of a special national board of twenty-two dealing with alien enemy control. He had accepted for publication a study of the movement for municipal home rule, and was invited by the Committee on Government of the Social Science Research Council to undertake investigations involving the administration of the alien enemy hearing boards and the problem of the conscientious objector, respectively. He was an editor of *The American Political Science Review*, and a member both of the Committee on Election Statistics and of the Committee on Nominations of the American Political Science Association. In March 1943, he attended in Chicago a meeting of the Committee on Government of the Social Science Research Council, and he prepared two papers for presentation at the annual meeting of the American Political Science Association which could not be held in December owing to war conditions. He held membership on the Committee on the Lower Division and on the Committee on Graduate Study during the year.

Mr. Fairman served as lieutenant colonel in the Judge Advocate General's Department of the United States Army and was assigned to the Allied Military Government of Occupied Territories. He continued as a member of the executive council of the American Political Science Association and the Nominating Committee of the American Society of International Law, and was nominated as a member of the council of the American Association of University Professors to represent the Pacific Coast area. During the past year he revised his *The Law of Martial Rule* for publication.

Mr. Buck acted as chairman of the Scholarship Committee and as assistant director of the European Area and Language program and director of the 9L or graduate course in this same program. He lectured for the Carnegie Foundation at the International Relations Clubs Conference for the Southern California and Arizona Region in October, and, among other lectures, spoke before the San Jose Adult Education Forum, the Salinas Adult Education Forum, the San Francisco League of Women Voters, and the Commerce Evening High School Forum in San Francisco.

Dr. Holsti participated in the European Area and Language program with important contributions from his experience in the diplomatic field and participation in the administration of the League of Nations. He attended the Pan European Conference held in New York in March and the Conference on Postwar International Law and Organization held in San Francisco in April. He spoke on "Pan European Relations" before the Association of American-Finnish Relations in Fitchburg, Massachusetts; on "Post-war Planning" over station KYA, and before several Finnish societies in the San Francisco Bay area.

Mr. Masland continued on leave until July, serving as an officer of the Division of Political Studies (formerly Division of Special Research) of the Department of State in Washington. In July he returned to the University for assignment to the staff of the Far Eastern Area and Language program. He was promoted to the rank of associate professor upon assuming his new duties.

Mr. John T. Salter, of the University of Wisconsin, spent the year at

Stanford offering courses in politics during the absence of Mr. Barclay on his sabbatical. Mr. Salter addressed several groups on political characters which he has portrayed in his various books on political bosses.

Mr. Cottrell continued as executive head of the department and as chairman of the School of Social Sciences. He served as a member of the Executive Committee, of the Independent Study Plan Committee, the Committee on the Selection of a New President, the War Council and its Judicial Committee, as Director of the European Area and Language unit of the Army Specialized Training Program, as chairman of the University Services committee, as a member of the University committee on Civilian Protection, and was elected a member of the Advisory Board for the next three years. During the year he was elected president of the Western Governmental Research Association, continued as past president of the San Francisco Bay Area Chapter of the American Society for Public Administration, vice-president of the California Merit System League, chairman of the Committee on Public Service Fellowships of the California National Youth Administration, and as a public member of panels for the National War Labor Board in the Tenth Region. He attended a conference on the operation of the Schools of Military Government under the Provost Marshal General's Department at Chicago in March, and was elected a member of the Educational Advisory Committee for the Provost Marshal General. He addressed the San Francisco Alumni Conference in February and the one in Los Angeles in May on "Saving Home Rule," the Burlingame Charter Committee on the preparation and campaign for a new city charter, and the City and County Government Section of the Commonwealth Club of California on weaknesses of county government as found by the California Commission on Home Rule and the California State Reorganization Committee of which he was a member. He was engaged as consultant for the writing, passage, and installation of a council-manager municipal charter at Las Vegas, Nevada.

It is a pleasure to report that assistants in the department during the past year have received important appointments in various government departments. Laurence R. Grannis is an ensign in the United States Navy; Sam Grover Rich was appointed vice-consul in Valencia, Spain; Peter Bachrach is with the Regional War Labor Board in San Francisco; Tina Varanini has been appointed Junior Economic Analyst with the Federal Department of Agriculture; and two students, Florence Walls and Beryl Robison, are also with the Department of Agriculture, in the Food Distribution Division.

EDWIN ANGELL COTTRELL
Professor of Political Science

PSYCHOLOGY

The active staff consisted of Paul Randolph Farnsworth, Calvin Perry Stone, Edward Kellogg Strong, Jr., professors; Maud Merrill James, associate professor; Roger Garlock Barker, Roland Charles Travis, acting

associate professors; Rheem Foster Jarrett, Gretchen Ann Magaret, instructors; Charles Edward Stuart, Psychical Research Fellow and instructor; Melita Oden, research associate; Edith Dorothy Brownfield, Buckel Fellow; Vee Jane Holt, research assistant in neuropsychiatry; Guy E. Brown, Linda Elizabeth Rehm, Paul Henry Mussen, Gwynne Nettler, Alex Carleton Sherriffs, Edward Lewis Walker, assistants in instruction and research. Janet Irene Snelling held a Royall Victor Fellowship for the year; Eduard Nicolaysen was awarded a Newell Scholarship and Glen Allen Holland a Switzer Fellowship.

Professor Ernest Ropiequet Hilgard and Associate Professor Quinn McNemar were on leave of absence for the entire period and Professor Lewis Madison Terman, after over thirty years at Stanford, was made emeritus at the beginning of the year. Dr. Terman was succeeded as chairman of the department by Dr. Hilgard. At the end of July Miss Katherine Murray resigned as secretary after many years of service in the department. She was succeeded by Mrs. Grace Mortsof.

During the year the department suffered the loss of Professor Emeritus Lillian Jane Martin, who died on March 27.

In addition to its regular teaching schedule the department, with the aid of Acting Assistant Professor Ronald Kenneth Campbell of the Graduate School of Business, taught a two-quarter curriculum in personnel psychology for 109 cadets of the Army Specialized Training Unit and offered a special course in general psychology for cadets in the premedical ASTP. Tests and interviews were given from time to time to cadets in the Stanford Student Training Assignment Reclassification unit.

Five hundred forty-six civilian students registered for courses in the Psychology Department during the autumn quarter, 535 in the winter, 649 in the spring, and 246 in the summer. In addition, 109 cadets of the ASTP enrolled in the Personnel Psychology program of Term 4 (May 12-August 1), 97 in Term 5 (August 9-November 1) and 18 in the general psychology course for premedical ASTP cadets (July 12-October 1).

During the autumn quarter there were 40 undergraduate majors and 10 graduate majors; in the winter quarter, 36 undergraduate and 10 graduate majors; in the spring, 33 undergraduate and 10 graduate majors; and in the summer, 22 undergraduate and 5 graduate majors.

During the year 17 students completed their work for the Bachelor's degree, 3 for the Master's degree, and 3 for the degree of Doctor of Philosophy. The following theses were accepted:

For the degree of Master of Arts: Lewis Gibbs Carpenter, Jr. (under United States Army auspices on a subject of special military interest); Paul Henry Mussen (under Dr. Barker), "Cripple Stereotypes and Attitudes toward Cripples"; Janet Irene Snelling (under Dr. James), "An Exploratory Study of the Combined Use of Modified Guess-Who, Sociometric, and Personal-Attitude Techniques for the Study of Inter-Personal and Social Relationships among Fifth-Grade Children."

For the degree of Doctor of Philosophy: William Mason Danner, Jr. (under Dr. Farnsworth), "An Experimental Study of College-Level Silent Reading under Audible Rhythmic Stimulation"; Jack Rex Gibb (under Dr.

Hilgard), "The Influence of Stimulus and Response Changes and of Degree of Learning upon Transfer of Training"; Clare Wright (under Dr. James), "The Nature of the Decline of Performance Abilities in Adult Morons as Compared with that of Normal Adults."

In co-operation with the Society of Sigma Xi, the department sponsored on March 30 an illustrated lecture on "Behavioral Growth of Children: Sequences and Patterns," by Professor Arnold Gesell, of the Yale University Clinic of Child Development.

The department also arranged a series of conferences between its students and Mr. John H. Ohlson, late of the California Civil Service Commission. The topic concerned the training essential to positions in civil service.

Dr. Terman, with the assistance of his research associate, Mrs. Oden, continued work on the preparation of Volume IV of *Genetic Studies of Genius*. This work will constitute a detailed report of twenty years' follow-up of more than a thousand intellectually superior persons who were first tested and studied as children in 1922. The results of the follow-up have been statisticized but the completion of the manuscript has been delayed by the illness of Dr. Terman during a portion of the school year.

Dr. Terman continued his editorial activities mentioned in previous numbers of the *President's Report*.

Until March Dr. Hilgard continued with the Bureau of Intelligence, Domestic Branch, Office of War Information; thereafter he served as deputy chief, Bureau of Research and Analysis, Overseas Branch, Office of War Information.

Dr. Hilgard was elected a member of the Council of Directors both of the American Psychological Association and of the Society for the Psychological Study of Social Issues. He served as a member of the Emergency Committee in Psychology of the National Research Council and was a delegate to, and chairman of the Continuation Committee of, the Inter-Society Constitutional Convention of Psychologists.

In his official capacity as president of the American Psychological Association, Dr. Stone presided during the first week of September at the annual Council and business meetings of the Association held in New York City from September 1 to 4. As chairman of the Election Committee of the American Psychological Association he assumed major responsibility for three ballot counts, each consuming from 40 to 60 hours. He attended one of three meetings of the Committee on Survey and Planning, a subcommittee of the Emergency Committee, National Research Council, and assisted by correspondence in several of their projects during the year. As a delegate of the American Psychological Association he attended the Intersociety Convention, a three-day conference of psychological societies held in New York City to effect plans for one national psychological association.

With other colleagues of the psychology department he visited hospitals, personnel departments, and psychological examining boards in ten industrial and military establishments in northern California during the spring and summer quarters to acquire additional background for participating effectively in the Army's Personnel Psychology program then being

that the faculty of the school be granted the power to prescribe curricula and recommend for degrees, both graduate and undergraduate; (c) that the faculty be charged with offering courses in history required by the University or any school thereof; (d) that the faculty be charged with the development of co-operative work with the staff of the Hoover Library in the fields of historical research that fall within the library's scope.

The adoption of this plan was urged by the department faculty, and supplementary statements supporting and explaining the need were made by the executive head in November, in January, and in April and May. It is our understanding that the plan is now before the academic committee of the Board of Trustees. The developments of the past year have emphasized the soundness of the plan and the need of such a presentation at this particular time. The need is seen in the great interest expressed outside the University in the work of the Institute of American History, in the evident call for more teachers of history for the high schools and junior colleges, in the call for "history" in plans of courses for men in the Armed Services, most of all in the growing demand for the use of "history" in general education in postwar planning and in graduate study.

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Professor Yamato Hihashi, who became a member of the Stanford faculty in 1913 and professor of Japanese history and government in 1930, retires at the end of this year and becomes professor emeritus. Professor Lynn T. White, a graduate of this department and for the past six years a member of its faculty, has resigned to accept election as president of Mills College. Appointments in their fields of research and teaching and in that of the late Professor Martin have yet to be made.

EDGAR EUGENE ROBINSON
*Margaret Byrne Professor of
American History and
Executive Head*

DIVISION OF JOURNALISM

The staff of the Division of Journalism for 1942-43 consisted of Chilton R. Bush, professor; Clifford F. Weigle, associate professor; Thomas M. Newell, instructor (autumn); Edward J. Demson (spring), James C. Nute (winter and spring), and Herbert K. Reynolds (winter), lecturers.

Class enrolment, exclusive of practice courses, was 309, and the number of Bachelor's degrees granted was 16. This represents a decline of about 30 per cent.

Dr. Farnsworth served as director of Stanford's Personnel Psychology unit of the ASTP and taught the program's course on social psychology and a portion of its course on tests and measurements. He served as an interviewer two afternoons a week in the STAR program. During the winter quarter he offered as a war service a course (with Dr. LaPiere) on "Morale in Wartime."

During the past year Dr. James's delinquency study has been continued. Statistical analyses of the data and evaluation of results are still in progress. In connection with Dr. James's studies of problem children, community facilities in Palo Alto have been extended and further developed. Requests for psychological clinic services have increased beyond the scope of present facilities. During the year Dr. James co-operated with members of the Sociology Department in organizing an extensive social service program.

Dr. James participated in the AST program, directing the tests and measurements course and participating in the course on interviewing.

Dr. James directed the research of one candidate for the Master's degree and of one candidate for the Doctorate.

Dr. McNemar was granted a leave of absence for 1942-43 to permit him to continue for a second year on the staff of the Social Science Research Council, New York City, as the administrator of their fellowship and research grants-in-aid programs. This extension of leave also enabled him to continue as a special consultant to the Research Branch, Special Service Division, Army Service Force, War Department, in Washington, D.C. About one-third of his time was devoted to this latter activity.

In the autumn quarter Dr. Barker introduced a new course, "Psychological Aspects of Rehabilitation," designed for students of psychology, education, and physical therapy who are preparing to engage in various aspects of rehabilitation work with the war and civilian disabled. Portions of this course were reviewed in the winter and spring for the students of physical therapy in Hygiene W267. Dr. Barker also participated (with the School of Health and the School of Education) in the establishing of a curriculum in nursery school training. This involved giving a lecture course and two laboratory courses, the latter with Miss Dorothy Tilden of the School of Health. These courses were given winter, spring, and summer quarters.

During the year Dr. Barker made the following addresses: "Social and Physiological Determiners of Behavior in Adolescence" to the Institute for the Study of Fitness, in San Francisco; "Psychological Aspects of Rehabilitation" to the regional meeting of the Western Psychological Association, in Berkeley; "Success and Failure in the Classroom" to the Jordan Junior High School Parent Teachers' Association, in Palo Alto. He also participated in a panel discussion on "Children in Wartime" before a conference in San Francisco, and attended the Stanford meeting of the Conference on Human Relations in Forestry. He served on the Committee on Rehabilitation of the Mental Hygiene Society of Northern California, the Elections Committee of the Academic Council, and the Stanford Nursery School Steering Committee.

Dr. Barker participated in the Personnel Psychology program by giving seven lectures in the course on tests and measurements and by having audi-

tors from the local STAR unit in his summer course in educational psychology. With J. S. Kounin and H. F. Wright, Dr. Barker edited a volume of research studies in child psychology for the use of college classes. This book represents an attempt to help bridge the gap between the laboratory, the clinic, and the college class room, and to extend the direct influence of research scientists beyond the limited circle of those who read technical journals.

Dr. Travis spent the major portion of the year designing and constructing new instruments for the laboratory. These included an adaptometer, a rotation chair, an orientation chair, a dynamic stabilometer, a pursuit oscillator, an electric contact maze for group learning experiments, a blind-spot apparatus, a counter ataxiometer, a range finder, and an apparatus for testing judgment of motion. His own researches concerned (a) a comparison of the Army Weft system and the Name-Plane Association method of airplane spotting; (b) the correlation of eye-hand co-ordination and ability to "lead" targets in target practice; (c) the postural determinants of static and dynamic sway; (d) the validation of two methods to measure postural equilibrium when standing on an unstable platform; and (e) the relationship between the ability to perceive passive rotation of the body and the ability to reorient the body to continuous displacement.

Dr. Travis declined a commission in the United States Naval Reserve in order to direct the laboratory training of the Stanford unit of the AST Personnel Psychology program. He acted in a consulting capacity on mechanical aptitude tests for the Army Air Force Basic Training Center at Fresno, and during the year visited four other military posts. He also participated in the Stanford meetings of the Conference on Human Relations in Forestry.

Within the department, Dr. Magaret taught several of the traditionally organized courses and also handled the independent study program in psychology, expanding this program so that there is now opportunity for independent study in psychology for three of the four quarters of each year. From May on, she co-operated in the AST program in Personnel Psychology, lecturing in the tests and measurements course and serving as chairman of the interviewing course. She also offered an AST course in general psychology for premedical students.

Within the University she presented a paper on "The Projective Approach to the Study of Personality" before the Faculty Research Club, lectured in Social Science 120 (Personal Problems in Modern Society), and spoke to such student groups as the Student-Faculty Forum on "Attitudes toward War," the Y.W.C.A. on "Psychological Problems in Marriage," and the Junior Hostess group on "Changing University Attitudes during Wartime."

Dr. Magaret spent the period between summer and autumn quarters at the Sonoma State Home collecting data for a study in collaboration with Dr. Clare Wright. The study will appear in the forthcoming *Journal of Applied Psychology* under the title "Limitations in the Use of Intelligence Test Results in the Detection of Mental Disturbance." In October her study "Parallels in the Behavior of Schizophrenics, Paretics, and Pre-senile

Non-Psychotics" was published in the *Journal of Abnormal and Social Psychology*. She is now conducting a study of some problems arising in the teaching of the first psychology course.

Dr. Stuart served both as a teacher and as the holder of the Thomas Welton Stanford Psychical Research Fellowship. In his capacity as teacher he offered courses to civilian students and aided in the laboratory instruction of the cadets in the AST program in Personnel Psychology. His researches concerned an experimental re-investigation of the primary problem of psychical research, i.e., telepathy. Dr. Stuart continued as an associate editor of the *Journal of Parapsychology*.

To satisfy a need expressed by a number of students who were about to enter the Armed Forces or who wished to prepare for work in civil service Mr. Jarrett (with Dr. Magaret) developed a course in test construction which was offered spring and summer quarters. Mr. Jarrett also offered the statistics courses normally given by Dr. McNemar, the statistics portion of the AST program, and a course in industrial psychology. Mr. Jarrett participated in the Stanford meetings of the Conference on Human Relations in Forestry.

PAUL RANDOLPH FARNSWORTH
Professor of Psychology

APPENDIX III

COMMITTEE REPORTS

ATHLETICS

Members.—O. N. Andersen (chairman), J. P. Mitchell (secretary), C. R. Bush, A. A. Esslinger, W. B. Owens (representative on Pacific Coast Intercollegiate Athletic Conference).

The Faculty Athletic Committee exercised the authority of the University over athletic sports within the University and in intercollegiate events and was responsible for: (1) the formulation of general athletic policy; (2) the control of athletic schedules; (3) co-operation with faculty representatives from other institutions in controlling intercollegiate competition and eligibility.

The Committee functioned within the rules of the Pacific Coast Conference which, in the case of intercollegiate competition, require that eligibility be based on the scholastic record of the previous quarter for any given student. However, in addition to this, the Committee kept a continual check on the scholastic records of athletes during the quarter they were in competition and took appropriate action whenever it was indicated.

The splendid co-operation of the University faculty with the work of the Committee is gratefully acknowledged.

O. N. ANDERSEN, *Chairman*

BOARD OF ATHLETIC CONTROL

Members of the Board were as follows: *faculty*, O. N. Andersen, W. B. Owens, J. P. Mitchell; *alumni*, Walter I. Ames, B. W. Burbank, Eugene Kern; *students*, the following student representatives attended one or more meetings during the year: Larry Dee, Ed Stamm, Charles Taylor, Jack Reynolds, Harold Dallmar, Carlos Brown, Al Hampson, Janet McClanahan; *officers*, Walter I. Ames (chairman), J. P. Mitchell (secretary-treasurer), O. N. Andersen (executive officer), A. R. Masters (general manager).

As indicated above, the student membership of the Board changed continuously during the year as one member after another left the campus for active war service. At the last two meetings of the year, Miss Janet McClanahan, student body president-elect, was an official representative.

This continuous changing of student representatives is a good reflection of the disorganization of athletic and student affairs during the year. Changes in personnel and arrangements occurred frequently, and after the football season was over intercollegiate competition felt the full force of the war emergency. At the end of the year it was given up.

During this period the Board did not meet regularly each month, but only in October, December, March, April, May, and June. At the October meeting a budget for 1942-43 was adopted to serve as a basis for necessary transactions, but with the knowledge that it would have to be readjusted in the

light of future developments. As a matter of fact, the financial condition of the Board was better at the end of the year than was expected, the result of retrenchments and reductions in estimated expenditures throughout the year. Nearly all the proposed schedules were reduced and nearly all travel by teams was eliminated.

At the December meeting the rule requiring "Block S" men to pay their alumni dues before they can secure complimentary tickets to athletic events was revoked.

At the March meeting it was decided that a balance of approximately \$3,000, the Stanford share of the proceeds from the Navy Pre-Flight Service football game, be used for the construction of an obstacle course to be available for use by men from all units of the Armed Services stationed in this area.

The maintenance of grounds and buildings was continued, and approximately \$10,000 was appropriated for this purpose, the largest part for painting the stadium. The golf course upkeep was reduced in extent and cost.

During the spring of 1943 it became apparent that intercollegiate competition could not be held during 1943-44. The two principal reasons were the drafting of men at the age of eighteen, and the establishment of an army student training unit on the campus whose members would not be allowed to take part in intercollegiate sports by Army regulations. Some correspondence and several meetings were held with Chancellor Ray Lyman Wilbur at which these developments were discussed. The result was the following formal resolution, adopted at the last meeting of the Board of Athletic Control on June 1, 1943:

Whereas, for the duration of the war men in attendance at Stanford University will be largely Army personnel, and the War Department does not favor the development of athletic teams and intercollegiate contests; and without such contests this Board will be without adequate income to operate, and

Whereas, the Board of Athletic Control desires to join the University Administration in co-operating to the fullest possible extent with the policies of the War Department, and

Whereas, it appears that the Army will require the use of Stanford's athletic fields, equipment, and staff, and that arrangement therefor must be consummated by direct contracts with the University and the War Department, and not with the Board of Athletic Control,

Now, therefore, be it resolved, That the Board of Athletic Control believes it advisable and requests that the University relieve the Board of Athletic Control, for the duration, of its responsibility in connection with athletic activities at the University; that the President approve the payment by the Board of all its outstanding financial obligations and that the remaining funds in the accounts of the Board of Athletic Control be transferred to the general fund of the University; that it be furthermore requested that, as far as possible, the following named staff of the Board of Athletic Control, Messrs. Everett S. Dean, Marchmont Schwartz, Harry Meiggs Wolter, Ernst M. Brandsten, Henry Wilfred Maloney, Charles Myron Sprague, Alfred M. Masters, Sam McDonald, and Miss Eunice DuPrau, be assumed by the University and that every endeavor be made to maintain this staff intact in order that it be available to resume the intercollegiate athletic activities with the cessation of hostilities, and that it be further recommended to the respective appointing powers that the personnel of the Board members be maintained at all times for such service as may be requested, in order to be available for resumption of intercollegiate athletics when feasible.

At the close of the year the balance remaining in the Branner Dormitory note was paid in full, and the balance on hand, after providing for the payment of all outstanding accounts, was approximately \$80,000.

The full financial report for the year will be printed in the Appendix to the *Report of the Students' Organizations Fund*, and a synopsis follows:

OPERATING STATEMENT

September 1, 1942, to August 31, 1943

INCOME

Fees, student (\$1.00 per quarter less refunds and Women's Athletic Association allowance)	\$ 7,991.25	
Fees, gymnasium (\$5.00 per quarter per man student, less refunds)	31,158.00	
Faculty athletic cards	833.73	
Gate receipts:		
Baseball	\$ 203.76	
Basketball	4,101.27	
Boxing	515.46	
Football	17,438.12	
Rose Bowl Game (Stanford's share)	\$ 5,973.51	
Santa Clara Game	17,860.92	
Big Game	58,209.85	
Southern California Game	14,797.54	
Washington Game	9,149.54	
U.C.L.A. Game	29,294.80	
Notre Dame Game	22,791.69	
Washington State Game	5,073.10	
Oregon State Game	2,991.03	
U.S. Navy Pre-Flight Game	2,489.88	
Idaho Game	1,696.45	170,328.31
Swimming	105.79	
Track	934.80	193,627.51
Fines, N.S.F. checks	20.50	
Fines, duplicate student body cards	51.00	
Interest	1,138.32	
Concessions	1,848.39	
Programs	2,329.71	
Boys' class income	399.23	
Incidental	964.75	
Gym Store profit	2,440.86	
Total income		\$242,803.25

EXPENDITURES

Intercollegiate sports, supplies and expense	\$ 66,739.78
Maintenance of grounds and buildings	29,478.59
Director's administrative expense	14,415.60
School of Health and salaries	81,627.50
Golf Course deficit	2,136.86
Interclass and intramural	241.78
Branner Dormitory note, interest payment	1,322.44
All other expenses	27,087.87
Total operating expenses	\$223,050.42
Total operating income	\$242,803.25
Less total operating expenses	223,050.42
Net operating income for year 1942-43	\$ 19,752.83

COMMITTEE REPORTS

Surplus as of August 31, 1942.....\$130,397.65
 Additions to surplus: unexpended reserves..... 7,373.84

\$137,771.49

Appropriations from surplus:

Branner Dormitory note, principal.....\$50,000.00
 Stadium and miscellaneous painting..... 10,000.00
 Student aid 3,399.00
 Tutoring 17.50 63,416.50 \$ 74,354.99

Surplus as of August 31, 1943.....\$ 94,107.82

BALANCE SHEET

August 31, 1943

ASSETS

Cash:

American Trust Company:

Commercial Account\$19,378.06
 Savings Account 23,192.00
 Payroll Account 50.00
 Special Payroll Account 50.00
 Refund Account 50.00
 Wells Fargo Bank, Savings Accounts..... 36,130.06
 Petty Cash Funds 3,723.72 \$82,573.84

Accounts Receivable\$ 3,833.31
 Checks returned by bank..... 2.00
 Prepaid insurance ... 2,490.59 6,325.90

Inventories:

Gym Store\$ 8,535.16
 Golf Course Pro Shop..... 671.48
 Golf Course Club House..... 349.45 9,556.09

Total assets\$98,455.83

LIABILITIES

Accounts Payable\$ 541.24
 Reserve, General Maintenance 3,806.77
 Surplus, August 31, 1943..... 94,107.82

Total liabilities\$98,455.83

The Board adjourned for an indefinite time on June 1, 1943.

JOHN PEARCE MITCHELL
Secretary-Treasurer

INDEPENDENT STUDY PLAN

The members of the Independent Study Committee included the following representatives of the faculty: Frederick Anderson (Romanic Languages), Edwin Angell Cottrell (Political Science), Alvin Christian Eurich (Education), Elmer D. Fagan (Economics), Albert Guérard (General Literature), Hazel Dorothy Hansen (Classics), Ernest R. Hilgard (Psychology), Arthur Garfield Kennedy (English Philology), Paul Harmon Kirkpatrick (Physics)

Ernest Krauskopf (Geology), John McClelland (English), Samuel Brooks Morris (Engineering), Harry John Rathbun (Law), Maxwell Hicks Savelle (History), David Elton Trueblood (Philosophy, Religion), and Edgar Eulie Robinson (History), chairman. Miss Lisette Emery Fast, the academic adviser for independent study, served as secretary to the Committee. Professors Eurich, Guérard, and Hilgard were on leave throughout the year.

University funds were provided for the independent study program in the Upper Division, including work in Western Civilization (History), American Government (Political Science), and General Psychology. The distribution of students carrying on independent work in the Lower Division appears as follows:

Course	Autumn	Winter	Spring	Summer
Western Civilization	47	43	51	37
American Civilization	20	17	9	..
American Government	11	5	..	..
General Psychology	13	12	18	..

Curtailement of independent work in Western Civilization in the winter and spring quarters, as compared with those quarters of the preceding year, is due in part to the loss of teaching personnel to the Armed Services and in part to the necessity of providing all divisions of the course (that is, History 10, 11, and 12) simultaneously. The best results in the selection and teaching of students on an individual basis require that the student remain with the same instructor throughout the three quarters of the course. Disruption of the schedule has, therefore, hampered the development of independent study groups.

The Political Science Department was so short of teaching personnel that only a few students could be provided with independent study in American Government during the autumn and winter quarters.

In the Upper Division, in spite of the scattering of civilian students, the principle of individual reading has been maintained in all of these departments, that is, History, Political Science, and Psychology, in which independent study is especially provided in the Lower Division.

Consultation with selected transfer students was continued in the autumn quarter. In the remaining quarters the number of students transferring to Stanford from other colleges and universities dropped to a negligible point.

Six students were at work on the University Independent Study Plan. One student withdrew from the Plan and subsequently withdrew from the University to enter the Armed Services; one was obliged to defer his work because of illness, but will resume in the coming year; and four students took oral examinations in the following fields: Betty Binns Fletcher, "Cultural History of Western Civilization since the Renaissance"; Oliver Edmund Lewis, "Nineteenth-Century Britain"; Robert O. Blake, "History and Relations of the Americas"; Charles E. Allen, "Postwar International Organization."

Mr. Dews graduated with great distinction; Mrs. Fletcher, Mr. Blake, and Mr. Allen, with distinction. Two other students graduated with great distinction under the University Plan this year—Mr. Willard Mitchell, who completed his independent study in the summer of 1942, and Mr. Bruce Carlisle, whose work on the Plan during his junior year was so outstanding that

he was excused from the oral examination with full credit at the beginning of his senior year in order to attend the Naval Language School at the University of Colorado. Mr. Carlson's work in the Naval Language School was accepted by Stanford in substitution for his senior year here and he was thus enabled to receive the Bachelor of Arts degree from Stanford.

Mr. Dews held a Weter Scholarship during the autumn and winter quarters, and Mr. Blake held a Weter Scholarship in the autumn, winter, and spring quarters. The extension of the scholarship to two students was made possible by an accumulation in the fund available.

Mr. and Mrs. James P. Weter and their daughter Winifred have supplemented their gift of \$12,500 for the support of the Weter Memorial Scholarship by an addition of \$3,500. This scholarship, awarded to a student carrying on work under the Independent Study Plan in History, has been granted for the year 1943-44 to Miss Harriette Sutherland.

Miss Sutherland will carry on a study of the British Empire in Asia under the direction of Professor Carl Brand. Two other students were admitted to the University Plan, one to commence in the summer and the other in the autumn. One student who was working on the University Plan during the current year will complete his work in the autumn of 1943.

Outstanding has been the individual and group work carried on in the course in General Psychology under the direction of Dr. Ann Magaret. Not only did she direct a dozen students in the field of general psychology throughout three quarters, in the third quarter she conducted individual work for six students in a second quarter of independent study in general psychology.

Following the introduction of independent study into the new field of American Civilization in the summer of 1942, this work was continued in the autumn, winter, and spring quarters of 1942-43, under the direction of Professors Charles A. Barker and Harold W. Bradley. This field of independent study in the Lower Division was of much interest to the students, nearly all of whom had previously carried on independent study in Western Civilization. A number of students chose to take this particular course in American Civilization, rather than the general course in American History, because of the availability of independent study.

It is still too early to judge of the effects (upon independent study in the freshman course in Western Civilization) of the admission to the University of pre-freshmen, although the experience of all of the instructors in this course in the current year has indicated that it is difficult to make selection of students for individual work, as has been the custom, in the first quarter of their residence in the University. This difficulty, added to the inconveniences imposed by lack of sufficient teaching personnel, has made necessary a number of modifications in the plan for the freshman work. There is now more need of the element of "continuity" in work provided by independent study, particularly in the freshman year. Under existing conditions, the course in Western Civilization is often the student's one experience with nonspecialized study.

Individual contact with students through the Independent Study Office has proved particularly advantageous at a time when many students are withdrawing from the University to enter the Armed Services. Need of

individual record within the University for future reference is obvious. Many students have recognized this advantage, and it is apparent that others will be able to avail themselves of the information on file concerning their work when they return to complete their university work, whether here or elsewhere.

Need of accelerated effort and emphasis upon individual attainment have been given much attention in all programs in time of war. Independent study meets that need and provides that emphasis, and always has done so. For the time, unfortunately, there are few with the inclination or the opportunity to follow programs in the field of liberal education. Doubtless the future will provide that opportunity, and necessity will dictate a rebirth of "freedom of the mind."

EDGAR EUGENE ROBINSON, *Chairman*

LOWER DIVISION ADMINISTRATION

The members were: J. P. Mitchell (chairman), T. S. Barclay, C. A. Barker, J. W. Bunn, E. D. Fagan, E. M. Farmer, P. R. Farnsworth, P. W. Harsh, W. H. Johnson, W. B. Kindy, A. L. London, John McClelland, R. A. Ogg, J. F. Oliphant, H. J. Rathbun, Max Savelle, S. A. Smith, F. W. Strothmann, Dean Mary Yost, and D. H. Young.

The work of the members of this Committee was profoundly affected by the pressing needs of men students subject to early draft, under the terms of the Selective Service Act. Individual adjustments had to be made in many cases, but whenever feasible, the structure of the University Lower Division requirements was maintained. The women students made fewer adjustments than the men. The personnel of the Committee also changed during the year, and from quarter to quarter, and much credit is due the members of the Committee who, often at a very real personal sacrifice, carried on the important functions of advising and guiding students.

The number of students registered in the Lower Division, by quarters, was 1,717 for the autumn quarter, 1,728 for the winter quarter, 1,316 for the spring quarter, and 635 for the summer quarter.

JOHN PEARCE MITCHELL, *Chairman*

PUBLIC EXERCISES

The following members of the faculty comprised the University Committee on Public Exercises for the year 1942-43: Warren Dwight Allen, Harold Maile Bacon, Karl Montague Cowdery, Paul Herbert Davis, John Wendell Dodds, Hubert Crouse Heffner, Paul Eugene Holden, James William McBain, Eliot Grinnell Mears, Samuel Brooks Morris, George Edward Osborne, David Elton Trueblood, and Edgar Eugene Robinson (chairman). The Committee functioned throughout the four quarters of the year, and Miss Mildred Worswick was secretary for that period.

Two University assemblies were called. On October 1 Chancellor Wilbur addressed the opening University meeting of the academic year; and

again at the opening of the summer quarter he addressed the students, including the members of the Army training units. Two special assemblies were called. On November 2 all men students were called to hear the presentation of programs of enlistment for college students by representatives of the Army, Army Air Corps, Navy, Navy Air Corps, and Marine Corps. On February 9 a student body assembly for the presentation of student officers was called and held from 9:40 to 10:30.

Late in the previous year and early in the present year the Committee considered the question of discontinuing its offering of the Tuesday Evening Series because of possible reduction in interest and attendance due to conditions of war. Decision to continue has been justified by the attendance, the total for the present year being 26,775, as compared with 27,988 in the previous year, and 32,538 in 1940-41. There has been greater difficulty in securing speakers, and the programs offered by agencies are more restricted and of greater cost. The Committee has not arranged as many symposia as in recent years (such as that on American Culture in 1939 and Contributions of Science in 1940), in part, because fields of discussion of interest to the members of the faculty and students have been developed by a series of symposia conducted under the auspices of the School of Humanities.

TUESDAY EVENING SERIES

October 6. Symposium, "The War: the Longer View." Speakers: Philip W. Buck, Karl Brandt, Harold H. Fisher, Lewis Mumford, and Lynn T. White. (865)*

October 13. Concert, Joseph James, baritone. (1,085)

October 20. Lecture, "The Brazilian Way of Life," Hernane Tavares de Sá. (534)

October 27. Lecture, "The Golden Eagle: King of the Air," Telford H. Work and Albert J. Wool. Illustrated with colored motion pictures. (804)

November 3. Lecture, "A Practical Blueprint for World Peace," Ely Culbertson. (482)

November 10. Lecture, "Nias: Isle of Gold," Deane Dickason. Illustrated with colored motion pictures. (1,172)

November 17. Lecture, "Can We Trust the Common Man?" William A. Lydgate, Editor, American Institute of Public Opinion (Gallup Poll). (246)

November 24. Lecture, "Twelve Months after Pearl Harbor," Howard Pierce Davis. (282)

December 1. Lecture, "Focus on Skis," Frank H. Howard, president, California Ski Association. Illustrated with colored motion pictures. (1,010)

January 7. Lecture, "North Africa," Graham Stuart, professor of political science. (690)

January 12. Illustrated lecture, "Exploration in the Andes," Paul Fejos. (1,013)

January 19. Illustrated lecture, "New Light on Old Masters," Joseph van der Elst. (552)

* Attendance is indicated by figures in parentheses.

January 26. Lecture, "Air Power for Victory," Geoffrey F. Morgan, manager, Speakers' Bureau, Douglas Aircraft Company. (277)

February 2. Lecture, "The Sun in Action," Seth B. Nicholson, head of the Solar Division, Mount Wilson Observatory. Illustrated with motion pictures. (654)

February 9. Concert, The San Francisco String Quartet. Naoum Blinder, first violin; Frank Houser, second violin; Ferenc Molnar, viola; Boris Blinder, violoncello; Francis Mannon, pianist, assisting artist. (722)

February 16. Lecture, "Birds from Sea to Sierra," C. A. Harwell, California Representative, National Audubon Society. Illustrated with colored motion pictures. (1,120)

February 23. Lecture, "Russia Now," Sir Bernard Pares, formerly professor of Russian history and literature, University of London. (582)

March 2. Lecture, "Literature and Life," Alfred Noyes. (920)

March 30. Lecture, "America's Wartime Leaders," Robert R. Gros. (104)

April 6. Lecture, "Postwar Europe," Betty Barzin. (344)

April 13. Lecture, "The Cavalcade of South America," Charles P. Weiser. Illustrated with colored motion pictures. (1,943)

April 20. Recital, George Stewart McManus, pianist. (464)

April 27. Multicentennial Tribute, "Copernicus, Galileo, Newton." Speakers: Lewis Mumford and Frederick O. Koenig. (311)

May 4. Concert, Alice Ehlers, harpsichordist, with the Stanford Orchestra, Ferenc Molnar, conductor; assisted by W. J. Flashman, flutist. (1,036)

May 11. Symposium, "Foreign Policies: Great Britain, Russia, United States." Speakers: Thomas A. Bailey, Carl F. Brand, and Harold H. Fisher. (427)

May 18. Lecture-recital, "The Chinese Drama," Cecilia Sieu-Ling Zung. (354)

May 25. Lecture, "Pueblo Indians of the Southwest," Ernest P. Hunt. Illustrated with colored motion pictures. (848)

June 22. Panel discussion. "Postwar International Co-operation in Education." Speaker: Grayson N. Kefauver, professor of education. Members of the panel: Philip W. Buck, I. James Quillen, Ralph H. Lutz, and Bayard Rustin. (238)

June 29. Lecture, "Philosophy in Wartime," Irwin Edman, professor of philosophy. (530)

July 6. Lecture, "Secrets of the Tide Pools," Alice H. Robertson. Illustrated with colored motion pictures. (935)

July 13. Illustrated lecture, "Cosmic Rays," Karl K. Darrow. (562)

July 20. Concert, London String Quartet, John Pennington, first violin; Laurent Halleux, second violin; William Primrose, viola; C. Warwick Evans, violoncello. (1,389)

July 27. Concert, London String Quartet. (1,132)

August 3. Dramatic reading, *The Damask Cheek*, by John van Druten and Lloyd Morris, read by Mrs. Guy Stevens Farrington. (470)

August 10. Recital, Kato Mendelssohn, pianist. (1,091)

August 17. Lecture, "The Pan-American Highway," Clark Bronson Day. Illustrated with colored motion pictures. (1,287)

SPECIAL EVENTS

October 23. Concert, Analee Camp, violoncellist; Ernst Bacon, pianist. (260)

January 13. Illustrated lecture, "The Yagua Indians of the Amazon," Paul Fejos. (153)

May 23. Concert, members of the University of California Orchestra and Chorus, Albert Elkus, conductor, assisted by the Stanford University Choir. (376)

The Committee considered plans for Commencement in somewhat greater detail than for some years. There was realization that the conditions resulting from the war made for new problems; particularly in less student participation and in possible smaller audience attendance. It was also felt that a participation of Army units was desirable, and an emphasis upon a nation at war in our ceremony and in the program. Many suggestions were considered. The Committee had the special advice and great aid of one of its members, Hubert Heffner of the Department of Speech and Drama. After his departure the middle of May the Committee called upon F. Cowles Strickland, and he sat with the Committee in its deliberations and planned and directed the ceremony of the awarding of degrees. The Commencement was held on June 13 and was attended by 510 candidates for degrees and an audience of approximately 3,200. In addition, 1,700 men of the Army training units stationed on the campus attended in a body. A band from the Page Mill Road Camp under the direction of William A. McArthur participated in the program. Major General Kenyon A. Joyce of the Ninth Service Command spoke briefly. The Commencement address on "The Human Family, Inc." was delivered by Chancellor Ray Lyman Wilbur. Registrar John Pearce Mitchell presented the candidates for degrees. The following, as representatives of Schools, participated in the awarding of the degrees: Lawrence R. Blinks, School of Biological Sciences; J. Hugh Jackson, School of Business; Lucien B. Kinney, School of Education; Samuel B. Morris, School of Engineering; Oswald N. Andersen, School of Health; John W. Dodds, School of Humanities and Letters; Marion R. Kirkwood, School of Law; Loren R. Chandler, School of Medicine; Paul H. Kirkpatrick, School of Physical Sciences; Edwin A. Cottrell, School of Social Sciences; and Ralph H. Lutz, Graduate Study. The marshals, directed by Harold Bacon, included the following: Harold Bradley, Irwin Abrams, George Knoles, William Irvine, Ernest Marchand, and Edward White. Max Savelle led the audience in the singing of *America* and *Hail, Stanford, Hail*. One hundred and fourteen members of the faculty attended. Accompanying Dr. Wilbur, Major General Kenyon A. Joyce, and President-Elect Tresidder were the aides of General Joyce and the following members of the Board of Trustees: Leland W. Cutler, George A. Ditz, Ira S. Lillick, Paul Shoup, and Marcus C. Sloss. Chaplain (Major) Alwyn E. Butcher gave the Benediction. The University Chaplain, D. Elton Trueblood, opened the exercises with prayer. The Baccalaureate Service was held as usual in the Memorial Church and was attended by 370 students and an audience of relatives and friends. The prayer was offered by Chaplain Butcher, and the Baccalaureate Sermon was delivered by University Chaplain D. Elton Trueblood.

A special Baccalaureate Service was held on March 14 for those students graduating at that time. Bishop Edward L. Parsons preached the sermon, and Chancellor Wilbur addressed the graduating seniors.

The Founders' Day observance was held on Tuesday evening, March 9, in the Memorial Church. The program consisted of instrumental music planned and directed by Warren D. Allen.

As in former years the Friends of Music have aided greatly by their interest, and they have also aided in making possible the following programs: Ernst Bacon, pianist, and Analee Camp, violoncellist; the San Francisco String Quartet and Francis Mannon, pianist, assisting artist; George Stewart McManus, pianist; Alice Ehlers, harpsichordist; the University of California Orchestra and Chorus; and the London String Quartet.

During the summer the Committee carried on all the work of Public Exercises as in other quarters. Notable in the summer program were the four concerts of chamber music given by the London String Quartet.

The Chairman of the Committee at the request of the Chancellor entertained the following visitors: Dr. Anthony Jurasz, director of the Polish Hospital at Edinburgh, and chairman of the Paderewski Testimonial Fund, Inc.; Sir John Pratt, formerly head of the Far Eastern Section of the British Broadcasting Corporation; Miss Margaret Bondfield, former member of the British Cabinet; Sir George Sansom, minister at the British Embassy, Washington, D.C.; Lieutenant (j.g.) Frances Rich of the WAVES; and Dr. Alexander D. Lindsay, Master of Balliol, Oxford.

In plans for the coming year it is to be noted that a special committee, consisting of Hubert Heffner, George Osborne, and Samuel B. Morris, is at work considering various proposals for the observance of Founders' Day.

Dr. Reinhold Niebuhr has accepted appointment as West Memorial Lecturer for 1943-44. The series of lectures will be offered in January of the coming year.

Thanks are due to many members of the faculty who have aided with suggestions of speakers and programs and who have often aided in the entertainment of visitors to the University. It should be said also that the Committee, representative of all divisions of the University, has worked in great harmony, and every member has contributed again and again with the work as in previous years.

The Chairman closes the sixth year of his present interrupted service and the fifteen years as Chairman since his first appointment in the spring of 1921. He does so with a deep sense of satisfaction. It has been a great privilege to serve the University in matters involving public relations.

Miss Mildred Worswick, who has given such fine service as secretary during the past six years, has been granted leave of absence to accept appointment as lieutenant (j.g.) in the Waves.

EDGAR EUGENE ROBINSON, *Chairman*

COMMITTEE REPORTS

Surplus as of August 31, 1942.....	\$130,397.65		
Additions to surplus: unexpended reserves.....	7,373.84		
		\$137,771.49	
Appropriations from surplus:			
Branner Dormitory note, principal.....	\$50,000.00		
Stadium and miscellaneous painting.....	10,000.00		
Student aid	3,399.00		
Tutoring	17.50	63,416.50	\$ 74,354.99
Surplus as of August 31, 1943.....			\$ 94,107.82

BALANCE SHEET

August 31, 1943

ASSETS

Cash:

American Trust Company:

Commercial Account	\$19,378.06	
Savings Account	23,192.00	
Payroll Account	50.00	
Special Payroll Account	50.00	
Refund Account	50.00	
Wells Fargo Bank, Savings Accounts.....	36,130.06	
Petty Cash Funds	3,723.72	\$82,573.84

Accounts Receivable	\$ 3,833.31	
Checks returned by bank.....	2.00	
Prepaid insurance	2,490.59	6,325.90

Inventories:

Gym Store	\$ 8,535.16	
Golf Course Pro Shop.....	671.48	
Golf Course Club House.....	349.45	9,556.09

Total assets\$98,455.83

LIABILITIES

Accounts Payable	\$ 541.24
Reserve, General Maintenance	3,806.77
Surplus, August 31, 1943.....	94,107.82

Total liabilities\$98,455.83

The Board adjourned for an indefinite time on June 1, 1943.

JOHN PEARCE MITCHELL
Secretary-Treasurer

INDEPENDENT STUDY PLAN

The members of the Independent Study Committee included the following representatives of the faculty: Frederick Anderson (Romanic Languages), Edwin Angell Cottrell (Political Science), Alvin Christian Eurich (Education), Elmer D. Fagan (Economics), Albert Guérard (General Literature), Hazel Dorothy Hansen (Classics), Ernest R. Hilgard (Psychology), Arthur Garfield Kennedy (English Philology), Paul Harmon Kirkpatrick (Physics).

the Hoover Research Institute, and Jozo Tomasevich of the Food Institute.

Chairman of the committee was on leave from May 1 to September and the School of Military Government, Charlottesville, Virginia. He attended the annual meetings of the National Association of Broadcasters in Chicago in April, met with public service executives of National Broadcasting Company to make arrangements for the Summer Radio and participated in two sessions of the Fourteenth Annual Institute of Radio by Radio at Columbus, Ohio, in May 1943. Mrs. Richardson served as State Radio Chairman for the California Conservation Council and with the radio observance of California Conservation Week, to 14, 1943.

Problems in relation to radio equipment created by the war and the demands upon the faculty have made impossible the development of satisfactory radio programming from Stanford which the committee to achieve. We are trying to make the things that can be done of high quality, and to be ready for the advance that will be possible when conditions of war have been met.

HUBERT C. HEFFNER, *Chairman*

RESEARCH

Committee on Research for 1942-43 consisted of Frederick Anderson, H. Boggs, John W. Dodds, George W. Dowrie, Lydik S. Jacobsen, McBain, Bayard Q. Morgan, Samuel B. Morris, Gilbert M. Smith, Stone, Edwin W. Schultz, Charles V. Taylor, Stephen P. Timoniaron C. Waters, David L. Webster,* and Ray Lyman Wilbur. Appropriation of \$4,000 was made by the Trustees of the University members of the faculty in pursuing their research projects. From the Committee made the following allotments:

PIENIT OF GRANT	AMOUNT	PURPOSE
Andersen.....	\$200.00	Continuance of the development of health knowledge tests, and assistance in physical fitness tests.
Anderson.....	25.00	Transcription of material bearing on the language of the inhabitants of Guam for use in studies on the philosophy of languages.
Bergstrom.....	250.00	Synthesis of heterocyclic compounds which may have antimalarial value.
Bestor, Jr.	96.30	Microfilming of manuscripts and printed material in a study of co-operatives—Fourierism and Brook Farm.
Clark.....	400.00	Purchase of liquid nitrogen and construction of camera to record diffraction patterns at low temperatures; purchase of auxiliary equipment needed for research on iron-cerium alloys.
Dr. Crismon.....	100.00	Partial purchase cost of sensitive galvanometer and photoelectric cell for use in experiments on hypothermia.
—		
on leave.		

COMMITTEE REPORTS

RECIPIENT OF GRANT	AMOUNT	PURPOSE
Arthur C. Giese.....	\$ 85.00	Purchase of a set of precision weights and a drying oven for samples to aid in research on the metabolism of <i>Neurospora</i> and on the nutrition of luminous bacteria.
Donald D. Hughes.....	200.00	Artist to illustrate unique species of Foraminifera; draftsman to prepare cross sections; stenographic work; and field trip in connection with a study of geologic history of northwestern California.
Willis H. Johnson.....	30.00	Purchase of a second-hand stove with an oven for sterilization of glassware for culture purposes.
Konrad Krauskopf	150.00	Purchase of X-ray tube accessories for use in studying structures of larger crystals and fine-grained sediments.
J. W. McBain and S. Ross.....	385.00	Cost of G.E. Diffraction X-ray Tube for use in examination of soap and detergent systems.
Herbert D. Meritt.....	150.00	Part of publication expenses of a manuscript entitled "Old English Glooses."
Carl R. Noller.....	125.00	Synthesis of organic compounds of possible value as antimalarials.
Richard A. Ogg, Jr.	250.00	Partial cost of specially designed photoelectric colorimeter for use in the study of reaction rates and equilibrium in the reaction of triphenylmethane dyes with ammonia and amines in aqueous solution.
Benjamin M. Page.....	150.00	Completion of research on strategic minerals; laboratory equipment, chemical analyses, and illustration of report on the Leavenworth Area, Washington.
Lockhart B. Rogers.....	340.00	Purchase of muffle furnace and complete set of Corex cells for use with a Beckman Spectrophotometer to carry out certain analyses.
Hubert G. Schenck.....	300.00	Researches in micropaleontology.
George F. Sensabaugh.....	150.00	Completion of a manuscript on the intellectual milieu of the seventeenth-century dramatist, John Ford.
Anthony E. Sokol.....	100.00	Procurement of books, maps, and clerical help to continue research work in the field of naval science and history, as a contribution to our war effort.
Karl Spangenberg	100.00	Investigation of the characteristics of 50-cm. Magnetron oscillators.
Hans K. Stauffer.....	35.00	Publication of the study on the occurrence of Globotruncana in the Galera Limestone; thin sections, material for microphotographs, and drafting of maps.
Calvin P. Stone.....	20.00	Construction of two "manual dexterity" peg boards for use in determination of all-round physical fitness.
Roland C. Travis.....	102.00	Apparatus to determine the relative roles of vision, kinesthesia, and vestibulation in response to rotation of the body in the horizontal, lateral, and sagittal planes.

EDWIN WILLIAM SCHULTZ, *Chairman*

SCHOLARSHIP

The members of the Committee were J. K. Allen, O. N. Andersen, Regi-Bell, John W. Bunn, J. Pearce Mitchell (secretary), Siemon W. Muller, B. Wells, Mary Yost, and Philip W. Buck (chairman). Olivia Byler as scholarship secretary.

CHANGES IN POLICY AND REGULATIONS

The conditional registration status adopted last year was abolished after a period of trial during which it was found not to accomplish the ends for which it was established.

Regulations governing scholastic deficiency were revised and simplified. Limits for probation for all Lower Division students, regardless of their position in the University, are now fixed at -6 to -30 grade points. Students carrying a deficiency of -31 are subject to disqualification.

SCHOLARSHIPS

Disbursements for scholarships increased \$4,500. Comparative figures are given below.

	1942-43	1941-42
University Scholarships (appropriation made by Board of Trustees).....	\$ 7,423	\$13,716
Income from endowed scholarships.....	37,108	31,239
Unendowed scholarship gifts.....	27,489	22,556
Totals	\$72,020	\$67,511

SCHOLARSHIPS AWARDED FOR THE YEAR 1942-43

I. HOLDERS NOMINATED BY COMMITTEE ON SCHOLARSHIP*

<i>Name of Scholarship</i>	<i>Holder</i>	<i>Amount</i>
	¹ Kenneth Lyman	\$160.00
	⁴ Alice Laura Beach.....	28.00
	³ Jean Elizabeth Bowe.....	143.00
	² Philip Ward Burton.....	143.00
	² Reynold Henry Colvin.....	166.00
	² Francis John Curry.....	160.00
	² Welko Elton Gasich.....	286.00
	² Paul Gilmore Hattersley.....	160.00
	² Vernice De Voe Hines.....	286.00
Ward R. Bacon.....	² Oscar Charles Holmes, Jr.....	286.00
	² Eleanore Marie Lindholm.....	136.00
	² Marion McClanahan	500.00
	² Frank Winston Norman.....	160.00
	² Joseph Mathew Oyster.....	160.00
	⁴ James Frederick Redding.....	13.00
	² Ethel Muriel Roberts.....	46.00
	² Robert Rubin	143.00
	² Robert Frank Ryan.....	143.00
	² Ralph Walker Schaffarzick.....	160.00

* The superior figure before the name of a holder indicates the quarter in which the scholarship was held: ¹ autumn quarter; ² winter quarter; ³ spring quarter; ⁴ summer quarter; ⁵ all four quarters. Where there is no superior figure, the scholarship was held the autumn, winter, and spring quarters.

COMMITTEE REPORTS

<i>Name of Scholarship</i>	<i>Holder</i>	<i>Amount</i>
Edward R. Bacon (<i>continued</i>)	²² Robert Alfred Van Wye.....	\$332.00
	² Guy Curtis Waid.....	160.00
	²⁴ Claudia Louise Walker.....	475.00
George Porter Baldwin	²² Paul A. F. Walter III.....	332.00
	⁶ Ralph Richard Heppe.....	666.00
Ella P. Briggs	Elsbeth Lucy McCollum.....	430.00
	Mary Elizabeth Reed.....	430.00
Evelyn F. Briggs	¹² William Clarke Dillinger.....	287.00
	⁴ Hermione Alice Jackson.....	143.00
Margaret Byrne	¹² John Traylor McLane.....	287.00
	¹² Betty Binns Fletcher.....	214.00
Cap and Gown	² Stella Marie Pollitz.....	666.00
	⁴ Alice Laura Beach.....	115.00
William W. Carson	Beryl Louise Robison.....	345.00
	¹² Frank Allen Cleveland.....	267.00
E. C. Converse	Virgil Bruce Dishongh.....	400.00
	Jane Hermione Susanna Grant....	400.00
W. J. Dickey	Alice Dean Lindberg.....	400.00
	⁴ Theodore Gregory Mihran.....	133.00
Henry G. Dodds	Bradley Garsed Morison.....	400.00
	⁴ George Percy Rostel.....	133.00
Orrin W. Dunn	¹² Roger Evan Helstrom.....	287.00
	Patricia Claire Newman.....	430.00
Hiram C. Fisk	¹² Dale Edwin Nielsen.....	286.00
	Charles Albert Reynolds.....	395.00
Florence Hecht Fries	⁴ Clifford Ellis Robinson.....	143.00
	James Marvin Weinberg.....	430.00
George E. Gamble	¹⁴ Irving Fine.....	267.00
	² Leonard Van Dyke Sullivan, Jr....	133.00
Justitia J. C. Glennie	Chalmers Acheson MacIrvine.....	400.00
	⁴ Charles Albert Reynolds.....	133.00
William F. Herrin	¹² Frank Winston Norman.....	250.00
	²² Verna Evelyn Wulff.....	204.00
Gertrude Gardiner	⁴ Francis John Curry.....	146.00
	¹² Joseph Mathew Oyster.....	200.00
William F. Herrin	⁴ Philip Ward Burton.....	200.00
	²⁴ Frank Allen Cleveland.....	286.00
William F. Herrin	David Smedley Colburn.....	600.00
	Robert Ross Compton.....	600.00
William F. Herrin	¹² James Robert Frolik.....	400.00
	¹ Laurence Royce Grannis.....	200.00
William F. Herrin	¹² Gilbert Pierce Haight, Jr.....	267.00
	⁴ Harrison Duane Heath.....	200.00
William F. Herrin	⁴ Theodore Jack Heckelman.....	200.00
	¹ Robert Wade Hughey.....	400.00
William F. Herrin	⁴ Donald Giltner Landale.....	200.00
	Ruben Fred Mettler.....	600.00
William F. Herrin	²⁴ Lyman Charles Nickel.....	286.00
	¹² Philip John O'Donnell.....	400.00
William F. Herrin	Donald Worthen Pendery.....	600.00
	³¹ Emery Herman Rogers.....	286.00
William F. Herrin	² Robert Rubin.....	143.00
	⁴ Norman Bulfinch Schieber.....	200.00
William F. Herrin	² Paul Holbrook Schute.....	143.00
	⁴ Donald Edward Sharp.....	200.00
William F. Herrin	² Joan Lincoln Farmer.....	52.00
	¹² Persis Marie Johnson.....	148.00
William F. Herrin	Clarence Alan Harvey.....	272.00
	¹ Willard Perry Norberg.....	180.00

January 26. Lecture, "Air Power for Victory," Geoffrey F. Morgan, manager, Speakers' Bureau, Douglas Aircraft Company. (277)

February 2. Lecture, "The Sun in Action," Seth B. Nicholson, head of the Solar Division, Mount Wilson Observatory. Illustrated with motion pictures. (654)

February 9. Concert, The San Francisco String Quartet. Naoum Blinder, first violin; Frank Houser, second violin; Ferenc Molnar, viola; Boris Blinder, violoncello; Francis Mannon, pianist, assisting artist. (722)

February 16. Lecture, "Birds from Sea to Sierra," C. A. Harwell, California Representative, National Audubon Society. Illustrated with colored motion pictures. (1,120)

February 23. Lecture, "Russia Now," Sir Bernard Pares, formerly professor of Russian history and literature, University of London. (582)

March 2. Lecture, "Literature and Life," Alfred Noyes. (920)

March 30. Lecture, "America's Wartime Leaders," Robert R. Gros. (404)

April 6. Lecture, "Postwar Europe," Betty Barzin. (344)

April 13. Lecture, "The Cavalcade of South America," Charles P. Weimer. Illustrated with colored motion pictures. (1,943)

April 20. Recital, George Stewart McManus, pianist. (464)

April 27. Multicentennial Tribute, "Copernicus, Galileo, Newton." Speakers: Lewis Mumford and Frederick O. Koenig. (311)

May 4. Concert, Alice Ehlers, harpsichordist, with the Stanford Orchestra, Ferenc Molnar, conductor; assisted by W. J. Flashman, flutist. (1,036)

May 11. Symposium, "Foreign Policies: Great Britain, Russia, United States." Speakers: Thomas A. Bailey, Carl F. Brand, and Harold H. Fisher. (427)

May 18. Lecture-recital, "The Chinese Drama," Cecilia Sieu-Ling Zung. (354)

May 25. Lecture, "Pueblo Indians of the Southwest," Ernest P. Hunt. Illustrated with colored motion pictures. (848)

June 22. Panel discussion. "Postwar International Co-operation in Education." Speaker: Grayson N. Kefauver, professor of education. Members of the panel: Philip W. Buck, I. James Quillen, Ralph H. Lutz, and Bayard Q. Morgan. (238)

June 29. Lecture, "Philosophy in Wartime," Irwin Edman, professor of philosophy. (530)

July 6. Lecture, "Secrets of the Tide Pools," Alice H. Robertson. Illustrated with colored motion pictures. (935)

July 13. Illustrated lecture, "Cosmic Rays," Karl K. Darrow. (562)

July 20. Concert, London String Quartet, John Pennington, first violin; Laurent Halleux, second violin; William Primrose, viola; C. Warwick Evans, violoncello. (1,389)

July 27. Concert, London String Quartet. (1,132)

August 3. Dramatic reading, *The Damask Cheek*, by John van Druten and Lloyd Morris, read by Mrs. Guy Stevens Farrington. (470)

August 10. Recital, Kato Mendelssohn, pianist. (1,091)

August 17. Lecture, "The Pan-American Highway," Clark Bronson Day. Illustrated with colored motion pictures. (1,287)

COMMITTEE REPORTS

<i>Name of Scholarship</i>	<i>Holder</i>	<i>Amount</i>
Leland Stanford, Jr., Memorial.....	¹² Jack Dale Burdick.....	\$320.00
		plus room
	⁴ James Marvin Weinberg.....	160.00
		plus room
	² Carol Frances Bartle.....	143.00
	² Norman Kauila Chung.....	163.00
	² Edwin Francis Cook.....	143.00
	² Clyde James Curley, Jr.....	143.00
	² Juanita Irene Gossman.....	143.00
	¹² Paul Gilmore Hattersley.....	334.00
Stanford Bookstore	² Eleanore Marie Lindholm.....	50.00
	Paul Holbrook Schute.....	143.00
	² Gordon Barker Severance.....	143.00
	Donald Edward Sharp.....	373.00
	Jack William Shields.....	250.00
	² Mervin Elmore Stromsmoe.....	143.00
	⁴ William Desmond Wagstaffe.....	143.00
	Helen Louise Young.....	500.00
	⁶ Richard Milne Bartle.....	572.00
	⁴ Willis Wallace Jourdin, Jr.....	143.00
Stanford Futures	¹² Beatrice Shrager	190.00
	⁶ Peter Yim Yee	572.00
Stanford Women's Club of the East Bay..	Marjorie Mize	150.00
Stanford Women's Club of San Francisco.	June Barbara Sutton.....	345.00
Arthur B. Stewart.....	² Marion June Bairos.....	143.00
	²⁴ Fernando Escobar Salinas.....	286.00
	¹² Kenneth Lyman Allen.....	320.00
	Vincent Anthony Arena.....	435.00
	¹² Jean Elizabeth Bowe.....	290.00
	⁴ Margaret Poole Briggs.....	143.00
	¹² William Hadley Clark.....	320.00
	¹² Francis John Curry.....	290.00
	Charles Floyd Delzell.....	435.00
	Frances Henriette Dekker.....	435.00
John M. Switzer.....	¹² Wilbur Harvey Dutton.....	290.00
	¹² James Camerer Engdahl.....	260.00
	¹² Richard Murry Halpern.....	320.00
	Warren Leon Jensen.....	435.00
	⁴ Burt Morley Kebrie.....	143.00
	Henrietta Evelyn MacCosbe.....	435.00
	Frances Carolyn Nielsen.....	435.00
	⁴ Frederic McLanahan Tonge.....	143.00
	Helene Har Lin Wong	435.00
	¹² Richard Felton Outcault, Jr.....	260.00
Harry A. True.....	¹² Robert Wallace Andrews.....	80.00
	Dale Harlan Austin.....	400.00
	Mary Ellen Booth.....	400.00
	¹² Maurice Gregg Buckley.....	267.00
	Betty Ruth Camomile.....	345.00
	Patricia Anne Charlton.....	345.00
	Emily Elizabeth Cousins.....	145.00
	Caroline Shelby Cralle.....	400.00
	⁴ Dennis Cunningham	133.00
	Charlotte Jean Davidson.....	400.00
University	⁴ Alice Munroe Eliot.....	133.00
	¹² James Camerer Engdahl.....	30.00
	Clarence Alan Harvey.....	158.00
	² Aubrey Hughes Harwood, Jr.....	143.00
	⁴ Margaret Moody Hayes.....	143.00

<i>Name of Scholarship</i>	<i>Holder</i>	<i>Amount</i>
	Theodore Jack Heckelman.....	\$400.00
	¹² Hermione Alice Jackson.....	315.00
	¹² Persis Marie Johnson.....	110.00
	⁴ Elsbeth Lucy McCollum.....	74.00
	Lois Flora Malnati	230.00
	Marion Johanne Nielsen.....	262.00
	¹ Frank Winston Norman.....	70.00
	¹ Joseph Mathew Oyster.....	120.00
	¹² William Arthur Perkins.....	206.00
ity (continued)	Betty Ann Porter.....	400.00
	George Paul Rostel.....	400.00
	¹ Margaret Anne Severance.....	115.00
	¹ Jack William Shields, ...	95.00
	¹ Idelle De Pere Sullens.....	30.00
	Harriette Grace Sutherland.....	246.00
	Lucile Stites Thompson.....	145.00
	²⁰⁰ Clarence Egbert Thurber.....	310.00
	⁴ Robert LeRoy Winslow.....	143.00
	¹⁴ Verna Evelyn Wulff.....	230.00
Wilson Vanderburgh.....	Harriette Grace Sutherland.....	86.00
Victor	¹² Miriam Rebecca Krauskopf.....	334.00
	Clarence Norman Peiss.....	500.00
nd Mary S. Yost.....	Kathleen Sophie Rueter.....	345.00

[. HOLDERS NOMINATED BY DONORS OR SPECIAL COMMITTEES

in Legion National Oratorical		
st	¹² Frank Forrester Church, Jr.....	\$286.00
	⁵ Adaline Wright Brown.....	572.00
	¹² James Spencer Brown.....	286.00
	Ann Byington	390.00
	²⁰ Edward William Cook.....	350.00
	¹ Bonnar Cox	143.00
	Mary Jane Donaldson.....	300.00
	² Thomas Nelson Elmendorf.....	150.00
ous	Jeanne Therese Hay.....	345.00
	⁴ Gunter Sewald Jaffé.....	115.00
	¹² James Bewley Kessler.....	286.00
	Marcia Nell McGilvray.....	429.00
	² George Anthony Michelson.....	250.00
	¹ Lyman Charles Nickel.....	143.00
	¹ Nancy-Jane Nickerson	330.00
	² Florence Swan Porter.....	172.50
Bowman.....	Darrell Lloyd Ritter.....	400.00
Clark.....	⁶ Richard Conger Clark.....	572.00
	¹² William Robertson Davis.....	334.00
cial Credit Company.....	² Edward Watson Howden.....	163.00
	⁴ Stanley Scott Tornbom.....	120.00
	¹ Edward Abraham Zeisler, Jr....	51.00
Hyde Cory.....	Nevada Chalmers McPherrin.....	304.00
	Rex Williams Cranmer.....	250.00
E. Crothers.....	⁴ Leonard Burland Low.....	83.00
l Mrs. George A. Ditz.....	¹² Thomas Newton Russell.....	267.00
Hassler	¹² Michael Radakovich.....	194.00
Union High School Valedictorian..	⁴ Heston Lawsbe Wilson, Jr.....	100.00
	²⁴ John Merrill Bell	270.00
	⁶ Thomas Nelson Elmendorf.....	537.00
	¹² Harold Merrill Hill.....	267.00
	¹² Garver Llewellyn Jensen.....	267.00

COMMITTEE REPORTS

<i>Name of Scholarship</i>	<i>Holder</i>	<i>Amount</i>
Kellogg (<i>continued</i>)	¹⁰ William Frederick Luttgens.....	\$537.00
	¹¹ David James McKay.....	140.00
	¹² James Walsh Martin.....	267.00
	¹³ Camile Joseph Pertuit.....	267.00
	¹⁴ Ralph Walker Schaffarzick.....	267.00
Lagunita Junior Class.....	¹⁵ Vicki Sophie Gorter.....	132.14
John Stewart Low.....	¹⁶ John Michael Ackerman.....	200.00
Frederick Dewey Michaels.....	¹⁷ Homer Frank Herz.....	133.00
C. O. G. Miller.....	¹⁸ Isabel Christina Jensen.....	75.00
	¹⁹ Iris Margaret Lawton.....	75.00
Caroline S. G. Munro.....	²⁰ Frances Ellen Stong.....	250.00
George J. Presley.....	²¹ Milton Christerfer Vucinich.....	143.00
Roble Club (in memory of Adelaide Helena Simon)	²² Doreen Bayley	143.00
Roble Club	²³ Virginia Louise Feller.....	143.00
Richard F. Sandwick.....	²⁴ Emmet Joseph Cashin.....	50.00
	²⁵ Frank Andrew Spencer.....	150.00
	²⁶ Richard Ballantyne West.....	50.00
San Francisco Polytechnic High School...	²⁷ Frederick Joseph Linari.....	100.00
Stanford Alumni Association.....	Ruth Lynn Maxwell.....	390.00
Stanford Club of Chicago.....	²⁸ Alan Lee Baldwin.....	260.00
	Barbara White	390.00
Stanford Electrical Engineering.....	²⁹ Herbert John Cabral.....	50.00
Stanford Law	Aida Leticia Martinez.....	350.00
Stanford Women's Club of the East Bay...	³⁰ Evelyn Rosemary Esola.....	75.00
	³¹ Elizabeth Jane Williams.....	75.00
Stanford Women's Club of Los Angeles..	³² Marjorie Claire Gestring.....	260.00
Ruth Lucie Stern Eagle Scout.....	Richard James Stanwood.....	429.00
John Maxson Stillman.....	Leslie Andrew McClaine.....	150.00
Harriet McKeveatt Teague.....	Elwood Carter Greist.....	390.00
F. W. Van Sicklen.....	³³ Dixy Lee Ray.....	166.00
Agnes Walker	³⁴ Elizabeth Jane Bradley.....	140.00
	³⁵ Janet Irene Snelling.....	140.00
James Birdsell Weter.....	Robert Orris Blake.....	380.00
	³⁶ Oliver Edmund Dews.....	300.00

HONORS

Graduation honors were conferred on 106 students completing requirements for the degree of Bachelor of Arts during the four quarters ending with the spring of 1943. Great distinction was earned by 36 students and distinction by 70. The names of these students are listed in the Commencement Program and in the *Stanford Register*.

Lower Division honors were conferred on 52 students completing Lower Division requirements during the five quarters ending with the summer of 1943. The names of these students are listed in the *Directory of Officers and Students* and in the *Register*.

SCHOLASTIC DEFICIENCY

The total number of scholastic deficiencies increased from 738 in 1941-42 to 829 in 1942-43. The increase may be in part ascribed to the disturbing effects of the war, and in part to the fact that the Lower Division enrolment was somewhat larger. Although disqualifications dropped from 217 to 63.

probations increased from 521 to 766. These deviations were due to the shift in grade-point deficiency governing probation and disqualification as mentioned in the first section of this report.

SCHOLASTIC DEFICIENCIES INCURRED BY LOWER DIVISION STUDENTS

	1942-43			1941-42		
	Disquali- fication	Proba- tion	Total	Disquali- fication	Proba- tion	Total
Autumn	18	275	293	59	173	232
Winter	23	239	262	76	145	221
Spring	19	163	182	62	128	190
Summer	3	89	92	20	75	95
Total	63	766	829	217	521	738

RATIO OF GRADE POINTS TO REGISTERED UNITS

The scholastic average of the undergraduate students was 2.55 as compared with 2.53 for the preceding year. The women's average dropped .02, and the average for the men was .02 higher.

Figures compiled in previous years for student organizations such as honor and professional societies, athletic teams, and so on, were omitted this year. The basis for classification according to residence groups was slightly altered, so that the emphasis was placed on affiliation rather than on residence. For example, an initiated member of a fraternity, or a man who was still a pledge in his second year, would be included with his group even though he may not have resided there. On the other hand, first-year pledges of fraternities and sororities were not included with members of the Greek-letter organizations, but with members of the general freshman residence organizations, i.e., Encina and Roble.

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The column headed "Standing" (p. 374) shows how the ratios of the individual groups compare with the average of the University. The difference between the University average (2.55) and a perfect score (4.00) is divided into ten equal parts, and each group average is numbered according to the interval in which it falls. Thus a group whose standing is "+2" has an average between 2.71 and 2.85 inclusive. The same intervals are used to indicate ratios below the University average.

RECIPIENT OF GRANT	AMOUNT	PURPOSE
Arthur C. Giese.....	\$ 85.00	Purchase of a set of precision weights and a drying oven for samples to aid in research on the metabolism of <i>Neurospora</i> and on the nutrition of luminous bacteria.
Donald D. Hughes.....	200.00	Artist to illustrate unique species of Foraminifera; draftsman to prepare cross sections; stenographic work; and field trip in connection with a study of geologic history of northwestern California.
Willis H. Johnson.....	30.00	Purchase of a second-hand stove with an oven for sterilization of glassware for culture purposes.
Konrad Krauskopf	150.00	Purchase of X-ray tube accessories for use in studying structures of larger crystals and fine-grained sediments.
J. W. McBain and S. Ross.....	385.00	Cost of G.E. Diffraction X-ray Tube for use in examination of soap and detergent systems.
Herbert D. Meritt.....	150.00	Part of publication expenses of a manuscript entitled "Old English Glosses."
Carl R. Noller.....	125.00	Synthesis of organic compounds of possible value as antimalarials.
Richard A. Ogg, Jr.	250.00	Partial cost of specially designed photoelectric colorimeter for use in the study of reaction rates and equilibrium in the reaction of triphenylmethane dyes with ammonia and amines in aqueous solution.
Benjamin M. Page.....	150.00	Completion of research on strategic minerals; laboratory equipment, chemical analyses, and illustration of report on the Leavenworth Area, Washington.
Lockhart B. Rogers.....	340.00	Purchase of muffle furnace and complete set of Corex cells for use with a Beckman Spectrophotometer to carry out certain analyses.
Hubert G. Schenck.....	300.00	Researches in micropaleontology.
George F. Sensabaugh.....	150.00	Completion of a manuscript on the intellectual milieu of the seventeenth-century dramatist, John Ford.
Anthony E. Sokol.....	100.00	Procurement of books, maps, and clerical help to continue research work in the field of naval science and history, as a contribution to our war effort.
Karl Spangenberg	100.00	Investigation of the characteristics of 50-cm. Magnetron oscillators.
Hans K. Stauffer.....	35.00	Publication of the study on the occurrence of Globotruncana in the Galera Limestone; thin sections, material for microphotographs, and drafting of maps.
Calvin P. Stone.....	20.00	Construction of two "manual dexterity" peg boards for use in determination of all-round physical fitness.
Roland C. Travis.....	102.00	Apparatus to determine the relative roles of vision, kinesthesia, and vestibulation in response to rotation of the body in the horizontal, lateral, and sagittal planes.

EDWIN WILLIAM SCHULTZ, *Chairman*

	Average Number Students	Stand- ing	Average Ratio of Grade Points to Registered Units			
			Year	Autumn Quarter	Winter Quarter	Spring Quarter
<i>Fraternities (continued):</i>						
Alpha Tau Omega.....	33	-1	2.44	2.22	2.42	2.93
Delta Chi.....	29	-1	2.44	2.40	2.46	2.46
Alpha Sigma Phi.....	25	-1	2.43	2.34	2.31	2.78
Sigma Nu.....	28	-1	2.42	2.45	2.34	2.47
Kappa Sigma.....	26	-1	2.40	2.35	2.31	2.67
Delta Tau Delta.....	33	-2	2.38	2.42	2.33	2.40
Phi Gamma Delta.....	29	-2	2.38	2.36	2.47	2.17
Chi Psi.....	27	-2	2.35	2.34	2.36	2.37
Phi Delta Theta.....	25	-2	2.34	2.35	2.43	2.17
Delta Kappa Epsilon.....	28	-2	2.32	2.24	2.33	2.43
Beta Theta Pi.....	29	-2	2.31	2.24	2.50	2.14
Delta Upsilon.....	26	-3	2.19	2.34	2.11	2.12
Phi Sigma Kappa.....	8	-4	2.06	2.13	2.17	1.92
<i>University Residence Clubs:</i>						
Walter Thompson Co-operative.	631	-1	2.43	2.36	2.43	2.54
Toyon.....	14	+1	2.60	2.79	2.68	2.52
Tranner.....	124	+1	2.62	2.50	2.57	2.73
Branner.....	77	+1	2.61	2.63	2.59	.....
Sequoia.....	15	-1	2.51	2.52	2.49	.....
Encina.....	400	-2	2.32	2.20	2.32	2.49

Since the pressure of duties in Army training programs made necessary his resignation, the chairman wishes to express his gratitude to the members of the Committee who have so generously given effort and thought to handling the problems created by wartime conditions.

PHILIP W. BUCK, *Chairman*

UNIVERSITY PUBLICATIONS

The personnel of the Committee on University Publications for the academic year 1942-43 consisted of Professors Francis W. Bergstrom, Harold W. Bradley, William Hawley Davis, Karl Spangenberg, and David E. Faville, chairman.

The eight groups of publications in the University Series continued as: Biological Sciences; Education, Psychology; Engineering; Geology; History, Economics, and Political Science; Language and Literature; Mathematics and Astronomy; and Medical Sciences.

This year, like the preceding one, was unusually active for the publications committee. The budget started with a \$9.00 carryover from the previous year, was increased by \$150.00 beyond the customary \$1,000 to help cover the publication of an unusually worthy manuscript, and ended with a carryover of 95 cents to begin 1943-44 (final press costs not yet available).

Publications added to the University Series during the year under review were as follows:

COMMITTEE REPORTS

RECIPIENT OF GRANT	AMOUNT	PURPOSE
Arthur C. Giese.....	\$ 85.00	Purchase of a set of precision weights and a drying oven for samples to aid in research on the metabolism of <i>Neurospora</i> and on the nutrition of luminous bacteria.
Donald D. Hughes.....	200.00	Artist to illustrate unique species of Foraminifera; draftsman to prepare cross sections; stenographic work; and field trip in connection with a study of geologic history of northwestern California.
Willis H. Johnson.....	30.00	Purchase of a second-hand stove with an oven for sterilization of glassware for culture purposes.
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J. W. McBain and S. Ross.....	385.00	Cost of G.E. Diffraction X-ray Tube for use in examination of soap and detergent systems.
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Hubert G. Schenck.....	300.00	Researches in micropaleontology.
George F. Sensabaugh.....	150.00	Completion of a manuscript on the intellectual milieu of the seventeenth-century dramatist, John Ford.
Anthony E. Sokol.....	100.00	Procurement of books, maps, and clerical help to continue research work in the field of naval science and history, as a contribution to our war effort.
Karl Spangenberg	100.00	Investigation of the characteristics of 50-cm. Magnetron oscillators.
Hans K. Stauffer.....	35.00	Publication of the study on the occurrence of Globotruncana in the Galera Limestone; thin sections, material for microphotographs, and drafting of maps.
Calvin P. Stone.....	20.00	Construction of two "manual dexterity" peg boards for use in determination of all-round physical fitness.
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EDWIN WILLIAM SCHULTZ, *Chairman*

SCHOLARSHIP

The members of the Committee were J. K. Allen, O. N. Andersen, Reginald Bell, John W. Bunn, J. Pearce Mitchell (secretary), Siemon W. Muller, James B. Wells, Mary Yost, and Philip W. Buck (chairman). Olivia Byler served as scholarship secretary.

CHANGES IN POLICY AND REGULATIONS

The conditional registration status adopted last year was abolished after a period of trial during which it was found not to accomplish the ends for which it was established.

Regulations governing scholastic deficiency were revised and simplified. The limits for probation for all Lower Division students, regardless of their quarter in the University, are now fixed at —6 to —30 grade points. Students incurring a deficiency of —31 are subject to disqualification.

SCHOLARSHIPS

Disbursements for scholarships increased \$4,500. Comparative figures are given below.

	1942-43	1941-42
University Scholarships (appropriation made by Board of Trustees).....	\$ 7,423	\$13,716
Income from endowed scholarships.....	37,108	31,239
Unendowed scholarship gifts.....	27,489	22,556
Totals	\$72,020	\$67,511

SCHOLARSHIPS AWARDED FOR THE YEAR 1942-43

I. HOLDERS NOMINATED BY COMMITTEE ON SCHOLARSHIP*

<i>Name of Scholarship</i>	<i>Holder</i>	<i>Amount</i>
	⁵ Kenneth Lyman	\$160.00
	⁴ Alice Laura Beach.....	28.00
	³ Jean Elizabeth Bowe.....	143.00
	² Philip Ward Burton.....	143.00
	² Reynold Henry Colvin.....	166.00
	³ Francis John Curry.....	160.00
	² Welko Elton Gasich.....	286.00
	³ Paul Gilmore Hattersley.....	160.00
	⁴ Vernice De Voe Hines.....	286.00
Edward R. Bacon.....	² Oscar Charles Holmes, Jr.....	286.00
	² Eleanore Marie Lindholm.....	136.00
	² Marion McClanahan	500.00
	³ Frank Winston Norman.....	160.00
	³ Joseph Mathew Oyster.....	160.00
	⁴ James Frederick Redding.....	13.00
	² Ethel Muriel Roberts.....	46.00
	² Robert Rubin	143.00
	² Robert Frank Ryan.....	143.00
	³ Ralph Walker Schaffarzick.....	160.00

* The superior figure before the name of a holder indicates the quarter in which the scholarship was held: ¹ autumn quarter; ² winter quarter; ³ spring quarter; ⁴ summer quarter; ⁵ all four quarters. Where there is no superior figure, the scholarship was held for the autumn, winter, and spring quarters.

HOOVER LIBRARY

Although the Hoover Library has one of the largest collections of printed and manuscript material relating to World War I we have been aware that its holdings could be doubled without reaching completeness in this field.

The Director of Libraries has been concerned since he came to Stanford University in 1927 with the situation which would develop if there should be a World War II.

This war has now been in progress since 1939 and its end is not in sight. The areas involved are greater than those involved in World War I and the time element is likely to be greater.

It seems certain that a much larger literature will come into existence relating to World War II than exists for World War I. The relationship between the two conflicts makes it necessary for a specialized library to cover as completely as possible the intervening period of unstable peace.

Recognizing that available funds in the Hoover Library budget should largely be used in the development of the existing collections and that many publications of an ephemeral nature must now be purchased or possibly never acquired at all, the Director of Libraries has expended \$3,009.75 from general funds for the acquisition of valuable material in the Hoover Library field. These publications have been deposited in that library.

The Director of Libraries, in his private capacity, began the active collection of material for the Hoover Library shortly after Pearl Harbor. Up to the end of the academic year, 1942-1943, these acquisitions included:

Serial (issues)	2,851
Books and pamphlets	489
Posters	226
Maps	14
Civilian Defense publications	885
Photostats	45
Typescript	1
Sheet music	1
Coin	1
Total	4,513

All of the University Libraries have been extensively used by various agencies of the United States government.

STANFORD LIBRARY ASSOCIATION

The Stanford Library Association has remained relatively inactive during the year. Its organization has been maintained intact and with the end of the war it may be expected that it will play an important part in the development of the libraries.

A \$1,000 War Savings Bond was purchased at a cost of \$740. At the end of the year the sum of \$485.58 was on deposit with the American Trust Company.

STAFF

At no time during the year has there been a complete staff on duty. Resignations have been frequent and replacements difficult.

APPOINTMENTS

Irene Barquist, Assistant Secretary
 Flora Grossi, Bibliographer
 Isabel Price Santana, Bibliographer

RESIGNATIONS

Beatrice Elkins Crady, Assistant, Serial Division
 Sofie Lenitschner Eisenberg, Bibliographer
 Josephine Fabilli, Bibliographer
 Violet Shue, Curator of Special Collections

DIRECTOR'S OFFICE

LOUISE MAIER, *Secretary*
 MAXINE HEGLAND, *Assistant to the Director*
 IRENE BARQUIST, *Assistant Secretary*

Miss Hegland was given a leave of absence in order that she might accept a commission as Ensign in the WAVES.

The staff handled the inter-library loans, microfilm and photostat orders, stack permits, the issue of library cards to the men in Army Specialized Training, and the preparation of orders including 805 in the C series.

INTER-LIBRARY LOANS

Volumes lent:

To other libraries	524
To Hopkins Marine Station Library.....	32
To Lane Medical Library	72

Volumes borrowed:

From other libraries	475
From Hopkins Marine Station Library.....	12
From Lane Medical Library	188

SPECIAL COLLECTIONS

JEANNETTE M. HITCHCOCK, *Keeper of Rare Books*

ALBERT M. BENDER ROOM

Frederick E. Brasch, Esq., continued to make additions to the collection of the works of Isaac Newton and Newtoniana. These gifts included a holograph letter written in 1725, a signed document of 1718, a manuscript relating to the origin of Newton's family, and a marble bust of the eighteenth century believed to be by Rysbrack.

Mr. Brasch also presented two letters of Albert Einstein and a copy of his inaugural dissertation: *Eine neue Bestimmung der Moleküldimensionen*, Bern, 1905.

Professor Edgar Eugene Robinson presented a pocket diary of Levi Stovell covering the year 1849 dealing with his California travels and a journal of an expedition to the headwaters of the La Platte and Arkansas rivers by J. P. Bell during 1820.

COMMITTEE REPORTS

<i>Name of Scholarship</i>	<i>Holder</i>	<i>Amount</i>
Leland Stanford, Jr., Memorial.....	¹² Jack Dale Burdick.....	\$320.00
		plus room
	⁴ James Marvin Weinberg.....	160.00
		plus room
	² Carol Frances Bartle.....	143.00
	² Norman Kauila Chung.....	163.00
	² Edwin Francis Cook.....	143.00
	² Clyde James Curley, Jr.....	143.00
	² Juanita Irene Gossman.....	143.00
	¹² Paul Gilmore Hattersley.....	334.00
Stanford Bookstore	² Eleanore Marie Lindholm.....	50.00
	² Paul Holbrook Schute.....	143.00
	² Gordon Barker Severance.....	143.00
	Donald Edward Sharp.....	373.00
	Jack William Shields.....	250.00
	² Mervin Elmore Stromsmoe.....	143.00
	⁴ William Desmond Wagstaffe.....	143.00
	Helen Louise Young.....	500.00
	⁶ Richard Milne Bartle.....	572.00
	⁴ Willis Wallace Jourdin, Jr.....	143.00
Stanford Futures	¹² Beatrice Shrager	190.00
	² Peter Yim Yee.....	572.00
Stanford Women's Club of the East Bay..	Marjorie Mize	150.00
Stanford Women's Club of San Francisco.	June Barbara Sutton.....	345.00
Arthur B. Stewart.....	² Marion June Bairos.....	143.00
	²⁴ Fernando Escobar Salinas.....	286.00
	¹² Kenneth Lyman Allen.....	320.00
	Vincent Anthony Arena.....	435.00
	¹² Jean Elizabeth Bowe.....	290.00
	⁴ Margaret Poole Briggs.....	143.00
	¹² William Hadley Clark.....	320.00
	¹² Francis John Curry.....	290.00
	Charles Floyd Delzell.....	435.00
	Frances Henriette Dekker.....	435.00
John M. Switzer.....	¹² Wilbur Harvey Dutton.....	290.00
	¹² James Camerer Engdahl.....	260.00
	¹² Richard Murry Halpern.....	320.00
	Warren Leon Jensen.....	435.00
	⁴ Burt Morley Kebric.....	143.00
	Henrietta Evelyn MacCosbe.....	435.00
	Frances Carolyn Nielsen.....	435.00
	⁴ Frederic McLanahan Tonge.....	143.00
	Helene Har Lin Wong.....	435.00
	¹² Richard Felton Outcalt, Jr.....	260.00
Harry A. True.....	¹ Robert Wallace Andrews.....	80.00
	Dale Harlan Austin.....	400.00
	Mary Ellen Booth.....	400.00
	¹² Maurice Gregg Buckley.....	267.00
	Betty Ruth Camomile.....	345.00
	Patricia Anne Charlton.....	345.00
	Emily Elizabeth Cousins.....	145.00
	Caroline Shelby Cralle.....	400.00
	⁴ Dennis Cunningham	133.00
	Charlotte Jean Davidson.....	400.00
University	⁴ Alice Munroe Eliot.....	133.00
	¹ James Camerer Engdahl.....	30.00
	Clarence Alan Harvey.....	158.00
	² Aubrey Hughes Harwood, Jr.....	143.00
	⁴ Margaret Moody Hayes.....	143.00

BIBLIOGRAPHY DIVISION

FLORENCE CRAIG, *Chief*RUTH STEINMETZ, *Assistant Chief*

The catalog for the Engineering Library started in June 1942 now contains 17,166 cards. The work upon the following classes has been completed:

Aeronautics (621.499)
Metallurgy (669)
Mining engineering (622)
Electrical engineering (621.3-621.38)
Engineering serials, A-E (620.5)

The cataloging and recataloging of the Cubberley Library progressed steadily. Work completed included the cataloging of 976 new titles and the recataloging of 2,244 volumes.

The total number of volumes cataloged was 27,387, of which 4,065 were for the Hoover Library.

Cards filed in the general catalog totaled 129,857.

CIRCULATION DIVISION

WILLIAM OWENS, *Chief*

It has been difficult to provide service in the Circulation Division owing to our policy of depending to a large extent upon student assistance.

Thirty-nine student assistants were employed. None of these had previous library experience.

The total circulation was 214,215. This is a decrease of 85,898. The decrease was largely in the early part of the year before the Army program was well under way.

DOCUMENT DIVISION

MINNA STILLMAN, *Chief*

The decrease in graduate work has reduced the use of the material in the Document Division.

There has been an increase in the number of United States and state documents received.

British documents have reached us regularly with few gaps. It seems likely that the Parliamentary Papers for a two-year period have been lost in transit.

Documents received:

United States	32,330
Foreign	6,820
State and municipal	11,953
Total	51,103
Cards typed and filed	1,874

COMMITTEE REPORTS

<i>Name of Scholarship</i>	<i>Holder</i>	<i>Amount</i>
Kellogg (<i>continued</i>)	¹⁰ William Frederick Luttgens.....	\$537.00
	¹¹ David James McKay.....	140.00
	¹² James Walsh Martin.....	267.00
	¹³ Camile Joseph Pertuit.....	267.00
	¹⁴ Ralph Walker Schaffarzick.....	267.00
Lagunita Junior Class.....	¹⁵ Vicki Sophie Gorter.....	132.14
John Stewart Low.....	¹⁶ John Michael Ackerman.....	200.00
Frederick Dewey Michaels.....	¹⁷ Homer Frank Herz.....	133.00
C. O. G. Miller.....	¹⁸ Isabel Christina Jensen.....	75.00
	¹⁹ Iris Margaret Lawton.....	75.00
Caroline S. G. Munro.....	²⁰ Frances Ellen Stong.....	250.00
George J. Presley.....	²¹ Milton Christerfer Vucinich.....	143.00
Roble Club (in memory of Adelaide Helena Simon)	²² Doreen Bayley	143.00
Roble Club	²³ Virginia Louise Feller.....	143.00
Richard F. Sandwick.....	²⁴ Emmet Joseph Cashin.....	50.00
	²⁵ Frank Andrew Spencer.....	150.00
	²⁶ Richard Ballantyne West.....	50.00
San Francisco Polytechnic High School...	²⁷ Frederick Joseph Linari.....	100.00
Stanford Alumni Association.....	Ruth Lynn Maxwell.....	390.00
Stanford Club of Chicago.....	²⁸ Alan Lee Baldwin.....	260.00
Stanford Electrical Engineering.....	²⁹ Barbara White	390.00
Stanford Law	³⁰ Herbert John Cabral.....	50.00
Stanford Women's Club of the East Bay..	Aida Leticia Martinez.....	350.00
Stanford Women's Club of Los Angeles..	³¹ Evelyn Rosemary Esola.....	75.00
	³² Elizabeth Jane Williams.....	75.00
Ruth Lucie Stern Eagle Scout.....	³³ Marjorie Claire Gestring.....	260.00
John Maxson Stillman.....	Richard James Stanwood.....	429.00
Harriet McKeveit Teague.....	Leslie Andrew McClaine.....	150.00
F. W. Van Sicklen.....	Elwood Carter Greist.....	390.00
Agnes Walker	³⁴ Dixy Lee Ray.....	166.00
	³⁵ Elizabeth Jane Bradley.....	140.00
	³⁶ Janet Irene Snelling.....	140.00
James Birdsall Weter.....	Robert Orris Blake.....	380.00
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	1942-43			1941-42		
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Figures compiled in previous years for student organizations such as honor and professional societies, athletic teams, and so on, were omitted this year. The basis for classification according to residence groups was slightly altered, so that the emphasis was placed on affiliation rather than on residence. For example, an initiated member of a fraternity, or a man who was still a pledge in his second year, would be included with his group even though he may not have resided there. On the other hand, first-year pledges of fraternities and sororities were not included with members of the Greek-letter organizations, but with members of the general freshman residence organizations, i.e., Encina and Roble.

RATIO OF GRADE POINTS TO REGISTERED UNITS FOR THE VARIOUS UNDERGRADUATE STUDENT GROUPS

The column headed "Standing" (p. 374) shows how the ratios of the individual groups compare with the average of the University. The difference between the University average (2.55) and a perfect score (4.00) is divided into ten equal parts, and each group average is numbered according to the interval in which it falls. Thus a group whose standing is "+2" has an average between 2.71 and 2.85 inclusive. The same intervals are used to indicate ratios below the University average.

	Average Number Students	Stand- ing	Average Ratio of Grade Points to Registered Units			
			Year	Autumn Quarter	Winter Quarter	Spring Quarter
GENERAL						
University	2,600	0	2.55	2.52	2.56	2.58
Women	1,076	+1	2.66	2.70	2.68	2.61
Men	1,524	-1	2.47	2.42	2.47	2.54
Non-Sorority	815	+1	2.66	2.69	2.69	2.62
Sorority Affiliated	261	+1	2.66	2.72	2.67	2.60
Fraternity Affiliated	648	-1	2.47	2.44	2.46	2.54
Non-Fraternity	876	-1	2.46	2.40	2.48	2.54
CLASSIFICATION BY ORGANIZATION						
WOMEN						
Klahoya Club	28	+2	2.83	2.88	2.86	2.78
Non-organization Students	82	+1	2.70	2.78	2.69	2.61
University Residence Clubs:	732	+1	2.66	2.68	2.69	2.62
Lagunita	273	+2	2.76	2.79	2.81	2.69
Elm	12	+2	2.71	2.65	2.73	2.74
Union	59	+1	2.67	2.78	2.64	2.59
Mariposa	19	+1	2.67	2.64	2.86	2.46
Oaks	16	+1	2.65	2.85	2.62	2.47
Roble	245	+1	2.63	2.63	2.65	2.62
Hawthorne	13	+1	2.60	2.59	2.67	2.55
Madroño	31	-1	2.49	2.65	2.43	2.38
Manzanita	15	-1	2.46	2.14	2.39	2.57
Casa Ventura	40	-1	2.40	2.35	2.44	2.42
Sororities:*	261	+1	2.66	2.72	2.67	2.60
Gamma Phi Beta	28	+2	2.84	2.91	2.92	2.66
Alpha Omicron Pi	32	+2	2.75	2.74	2.69	2.82
Delta Gamma	28	+2	2.74	2.87	2.73	2.62
Delta Delta Delta	28	+2	2.74	2.82	2.67	2.70
Kappa Alpha Theta	29	+1	2.62	2.66	2.65	2.56
Chi Omega	29	+1	2.61	2.59	2.67	2.56
Pi Beta Phi	26	+1	2.59	2.57	2.55	2.66
Alpha Phi	30	+1	2.57	2.64	2.62	2.46
Kappa Kappa Gamma	31	-1	2.50	2.68	2.48	2.34
MEN						
Eating Clubs:	181	+1	2.59	2.57	2.62	....
El Tigre	36	+2	2.73	2.79	2.68	....
Breakers	22	+1	2.68	2.61	2.77	....
Los Arcos	26	+1	2.57	2.53	2.61	....
El Toro	29	0	2.55	2.52	2.58	....
El Campo	19	0	2.55	2.52	2.59	....
El Capitán	14	-1	2.49	2.49	2.49	....
El Cuadro	15	-1	2.40	2.31	2.49	....
Non-organization Students	245	-1	2.54	2.49	2.60	2.52
Fraternities:*	648	-1	2.47	2.44	2.46	2.54
Theta Delta Chi	26	+3	2.86	2.90	2.92	2.74
Alpha Kappa Lambda	22	+1	2.70	2.54	2.67	3.05
Theta Xi	22	+1	2.66	2.64	2.68	2.64
Phi Kappa Sigma	21	+1	2.65	2.54	2.65	2.99
Kappa Alpha	26	+1	2.63	2.61	2.63	2.67
Theta Chi	23	+1	2.62	2.52	2.59	2.85
Sigma Alpha Epsilon	36	+1	2.58	2.59	2.47	2.72
Phi Kappa Psi	33	0	2.55	2.55	2.54	2.58
Alpha Delta Phi	29	-1	2.49	2.52	2.44	2.52
Zeta Psi	31	-1	2.47	2.52	2.40	2.47
Sigma Chi	36	-1	2.46	2.44	2.42	2.57

* Excludes first-year pledges. Includes pledges after first year, and initiated members, regardless of residence.

	Average Number Students	Stand- ing	Average Ratio of Grade Points to Registered Units			
			Year	Autumn Quarter	Winter Quarter	Spring Quarter
<i>Fraternities (continued):</i>						
Alpha Tau Omega.....	33	-1	2.44	2.22	2.42	2.98
Delta Chi.....	29	-1	2.44	2.40	2.46	2.46
Alpha Sigma Phi.....	25	-1	2.43	2.34	2.31	2.78
Sigma Nu.....	28	-1	2.42	2.45	2.34	2.47
Kappa Sigma.....	26	-1	2.40	2.35	2.31	2.67
Delta Tau Delta.....	33	-2	2.38	2.42	2.33	2.40
Phi Gamma Delta.....	29	-2	2.38	2.36	2.47	2.17
Chi Psi.....	27	-2	2.35	2.34	2.36	2.37
Phi Delta Theta.....	25	-2	2.34	2.35	2.43	2.17
Delta Kappa Epsilon.....	28	-2	2.32	2.24	2.33	2.43
Beta Theta Pi.....	29	-2	2.31	2.24	2.50	2.14
Delta Upsilon.....	26	-3	2.19	2.34	2.11	2.12
Phi Sigma Kappa.....	8	-4	2.08	2.13	2.17	1.92
<i>University Residence Clubs:</i>						
Walter Thompson Co-operative.....	631	-1	2.43	2.36	2.43	2.54
Toyon.....	14	+1	2.69	2.79	2.68	2.52
Branner.....	124	+1	2.62	2.59	2.57	2.78
Sequoia.....	77	+1	2.61	2.63	2.59	....
Encina.....	15	-1	2.51	2.52	2.49	....
	400	-2	2.32	2.20	2.32	2.49

Since the pressure of duties in Army training programs made necessary his resignation, the chairman wishes to express his gratitude to the members of the Committee who have so generously given effort and thought to handling the problems created by wartime conditions.

PHILIP W. BUCK, *Chairman*

UNIVERSITY PUBLICATIONS

The personnel of the Committee on University Publications for the academic year 1942-43 consisted of Professors Francis W. Bergstrom, Harold W. Bradley, William Hawley Davis, Karl Spangenberg, and David E. Fa-ville, chairman.

The eight groups of publications in the University Series continued as: Biological Sciences; Education, Psychology; Engineering; Geology; History, Economics, and Political Science; Language and Literature; Mathematics and Astronomy; and Medical Sciences.

This year, like the preceding one, was unusually active for the publications committee. The budget started with a \$9.00 carryover from the previous year, was increased by \$150.00 beyond the customary \$1,000 to help cover the publication of an unusually worthy manuscript, and ended with a carryover of 95 cents to begin 1943-44 (final press costs not yet available).

Publications added to the University Series during the year under review were as follows:

Class	Vol.	No.	Author	Title	Pages	Commit- tee Con- tribution
Biological Sciences	VIII	2	Burt, C. E., and Myers, G. S.	<i>Neotropical Lizards in the Collection of the Natural History Museum of Stanford University</i>	52	\$273.05
Geological Sciences	III	3	Martin, L. T.	<i>Eocene Foraminifera from the Type Lodo Formation, Fresno County, California</i>	35	200.00*
Biological Sciences	IX	1	Myers, E. H.	<i>Biology, Ecology, and Morphogenesis of a Pelagic Fora- minifer</i>	30	235.00
History, Economics, and Political Science	V	2	Snyder, R. K.	<i>The Tariff Problem in Great Britain 1918-1923</i>	(Pages not yet determined)	450.00*

* Partial cost only, final press bills not yet received.

The financial transactions of the Committee for the year were as follows:

Balance:

Holdover balance from 1941-42 budgetary appropriation.....\$ 9.00

Receipts:

Budgetary appropriation 1942-43 1,000.00

Additional funds received from President's Contingent Fund

March 5, 1943 150.00

Total cash available for expenditure.....\$1,159.00

Deductions—appropriations to the Stanford Press for publications in
the University Series:

C. E. Burt and G. S. Myers manuscript, "Neotropical Lizards"
(actual cost)\$ 273.05

L. T. Martin manuscript, "Eocene Foraminifera from Type
Lodo Formation" (requisition estimate)..... 200.00

E. H. Myers manuscript, "Biology, Ecology, and Morphogenesis
of a Pelagic Foraminifer" (requisition estimate)..... 235.00

Rixford K. Snyder manuscript, "The Tariff Problem in Great
Britain 1918-1923" (requisition estimate)..... 450.00

\$1,158.05

Balance of unrequisitioned cash on hand August 31, 1943.....\$.95

The Committee's appropriable resources for the academic year 1943-44
as presently determinable (without receipt of actual press bills) are as fol-
lows:

Balance as above\$.95

Budget appropriation for 1943-44..... 1,000.00

Total\$1,000.95

It is noted that the same committee personnel has been appointed for the
year 1943-44.

DAVID E. FAVILLE, *Chairman*

APPENDIX IV

ADMINISTRATIVE REPORTS

STANFORD UNIVERSITY LIBRARIES

In the *Annual Report of the Director of University Libraries for 1941-1942* appears the statement: "We are . . . largely concerned with the impact of an imperative present." This could be made to read now: "We are . . . entirely concerned with an imperative present."

A voyage through rough waters is always a more stimulating experience than to be becalmed.

Each day we encounter new problems and engage in further attempts to solve old ones.

Although it has been difficult to get adequate personnel and to handle a substantial increase in the work of all of our libraries, we have maintained our normal services. The collections have been increased to an extent which compares favorably with the growth in recent years. Current binding and cataloging is not in arrears, and the hours of service remain unchanged except that the University Library is now opened for use at nine instead of at eight in the morning. The earlier opening hour will be restored as soon as circumstances permit.

There have been difficulties inherent in the limitations of plant. The presence of approximately 2,500 soldiers enrolled for Army Specialized Training has placed our Circulation Division and the various reading rooms under pressure.

In the prewar period the number of students making use of the library varied from day to day. The attendance rarely reached our capacity except during the week before examinations.

The soldiers stationed here are required to keep library hours. This has resulted in a nightly attendance which has placed seats in the reading room at a premium.

It is unfortunate that space was unavailable on the campus for use as study and recreation halls. The use of the reading rooms for these purposes has undoubtedly interfered with the uses for which they are intended—consultation of library materials in connection with courses of study and research.

An acute shortage in the supply of professional librarians exists. Many are doing library work for governmental agencies and the defense industries. Others, both men and women, have entered the armed services.

The senior members of the staff, without exception, have been willing to take on new duties and to increase their working hours.

For this the second year of the war extensive lists of acquisitions have been reduced or omitted from the annual report. Statistical data has been retained only as far as it was desirable to maintain a continuity of published data.

HOOVER LIBRARY

Although the Hoover Library has one of the largest collections of printed and manuscript material relating to World War I we have been aware that its holdings could be doubled without reaching completeness in this field.

The Director of Libraries has been concerned since he came to Stanford University in 1927 with the situation which would develop if there should be a World War II.

This war has now been in progress since 1939 and its end is not in sight. The areas involved are greater than those involved in World War I and the time element is likely to be greater.

It seems certain that a much larger literature will come into existence relating to World War II than exists for World War I. The relationship between the two conflicts makes it necessary for a specialized library to cover as completely as possible the intervening period of unstable peace.

Recognizing that available funds in the Hoover Library budget should largely be used in the development of the existing collections and that many publications of an ephemeral nature must now be purchased or possibly never acquired at all, the Director of Libraries has expended \$3,009.75 from general funds for the acquisition of valuable material in the Hoover Library field. These publications have been deposited in that library.

The Director of Libraries, in his private capacity, began the active collection of material for the Hoover Library shortly after Pearl Harbor. Up to the end of the academic year, 1942-1943, these acquisitions included:

Serial (issues)	2,851
Books and pamphlets	489
Posters	226
Maps	14
Civilian Defense publications	885
Photostats	45
Typescript	1
Sheet music	1
Coin	1
Total	4,513

All of the University Libraries have been extensively used by various agencies of the United States government.

STANFORD LIBRARY ASSOCIATION

The Stanford Library Association has remained relatively inactive during the year. Its organization has been maintained intact and with the end of the war it may be expected that it will play an important part in the development of the libraries.

A \$1,000 War Savings Bond was purchased at a cost of \$740. At the end of the year the sum of \$485.58 was on deposit with the American Trust Company.

STAFF

At no time during the year has there been a complete staff on duty. Resignations have been frequent and replacements difficult.

APPOINTMENTS

Irene Barquist, Assistant Secretary
 Flora Grossi, Bibliographer
 Isabel Price Santana, Bibliographer

RESIGNATIONS

Beatrice Elkins Crady, Assistant, Serial Division
 Sofie Leñtschner Eisenberg, Bibliographer
 Josephine Fabilli, Bibliographer
 Violet Shue, Curator of Special Collections

DIRECTOR'S OFFICE

LOUISE MAIER, *Secretary*
 MAXINE HEGLAND, *Assistant to the Director*
 IRENE BARQUIST, *Assistant Secretary*

Miss Hegland was given a leave of absence in order that she might accept a commission as Ensign in the WAVES.

The staff handled the inter-library loans, microfilm and photostat orders, stack permits, the issue of library cards to the men in Army Specialized Training, and the preparation of orders including 805 in the C series.

INTER-LIBRARY LOANS

Volumes lent:

To other libraries	524
To Hopkins Marine Station Library.....	32
To Lane Medical Library	72

Volumes borrowed:

From other libraries	475
From Hopkins Marine Station Library.....	12
From Lane Medical Library	188

SPECIAL COLLECTIONS

JEANNETTE M. HITCHCOCK, *Keeper of Rare Books*

ALBERT M. BENDER ROOM

Frederick E. Brasch, Esq., continued to make additions to the collection of the works of Isaac Newton and Newtoniana. These gifts included a holograph letter written in 1725, a signed document of 1718, a manuscript relating to the origin of Newton's family, and a marble bust of the eighteenth century believed to be by Rysbrack.

Mr. Brasch also presented two letters of Albert Einstein and a copy of his inaugural dissertation: *Eine neue Bestimmung der Moleküldimensionen*, Bern, 1905.

Professor Edgar Eugene Robinson presented a pocket diary of Levi Stovell covering the year 1849 dealing with his California travels and a journal of an expedition to the headwaters of the La Platte and Arkansas rivers by J. P. Bell during 1820.

The material in the Albert M. Bender Room was used by 1,548 readers. The Recordak film-reading machine was used by 107 readers.

Substantial progress has been made in the cataloging of the Mortimer Leventritt Collection.

CHARLOTTE ASHLEY FELTON MEMORIAL LIBRARY

Lack of personnel made it necessary to close the Charlotte Ashley Felton Memorial Library reading room on March 1. It will probably be necessary to keep it closed for the duration. In the meantime the resources of the library are readily available through the Albert M. Bender Room.

The acquisition program covering manuscripts and books in the field of American literature beginning with Nathaniel Hawthorne has been actively continued.

HOPKINS TRANSPORTATION LIBRARY

The book of accounts of the San Francisco and Alameda Railroad Company for 1866-1868 was presented by Mrs. Emily Cohen and Mr. Alfred Cohen, Jr.

The war has made it impossible to employ a curator with training in the fields of transportation.

The acquisition program was actively carried on.

The current serial list was increased by the addition of 52 new titles.

ELMER E. ROBINSON COLLECTION

Judge Robinson presented 131 volumes, 31 framed portraits of the Presidents of the United States with accompanying autograph letters or documents of the Presidents from Johnson to Franklin Delano Roosevelt.

STATISTICS

		Volumes
Albert M. Bender Room:		
Accessions (rare-book collection)	532	
Accessions (typographical collection)	4	
Accessions (Greenland collection)	7	
Charlotte Ashley Felton Memorial Library:		
Accessions	112	
Hopkins Transportation Library:		
Accessions	156	
Elmer E. Robinson Collection:		
Accessions	131	

Cards prepared:	Printed	Mimeo-graphed	Typed	Total
Albert M. Bender Room	737	38	445	1,220
Charlotte Ashley Felton Memorial Library	257	77	133	467
Hopkins Transportation Library	968	115	135	1,218
Elmer E. Robinson Collection	10	9	...	19
	1,972	239	713	2,924

BIBLIOGRAPHY DIVISION

FLORENCE CRAIG, *Chief*RUTH STEINMETZ, *Assistant Chief*

The catalog for the Engineering Library started in June 1942 now contains 7,166 cards. The work upon the following classes has been completed:

Aeronautics (621.499)
Metallurgy (669)
Mining engineering (622)
Electrical engineering (621.3-621.38)
Engineering serials, A-E (620.5)

The cataloging and recataloging of the Cubberley Library progressed steadily. Work completed included the cataloging of 976 new titles and the recataloging of 2,244 volumes.

The total number of volumes cataloged was 27,387, of which 4,065 were for the Hoover Library.

Cards filed in the general catalog totaled 129,857.

CIRCULATION DIVISION

WILLIAM OWENS, *Chief*

It has been difficult to provide service in the Circulation Division owing to our policy of depending to a large extent upon student assistance.

Thirty-nine student assistants were employed. None of these had previous library experience.

The total circulation was 214,215. This is a decrease of 85,898. The decrease was largely in the early part of the year before the Army program was well under way.

DOCUMENT DIVISION

MINNA STILLMAN, *Chief*

The decrease in graduate work has reduced the use of the material in the Document Division.

There has been an increase in the number of United States and state documents received.

British documents have reached us regularly with few gaps. It seems likely that the Parliamentary Papers for a two-year period have been lost in transit.

Documents received:

United States	32,330
Foreign	6,820
State and municipal	11,953
Total	51,103
Cards typed and filed	1,874

ORDER DIVISION

ELIZABETH HADDEN, *Chief*

The net accessions were 27,496. The total number of volumes in the University Libraries at the end of the academic year was 867,658.

Included in the accessions were:

338 volumes for the Albert M. Bender Room.

250 volumes for the Charlotte Ashley Felton Memorial Library.

126 volumes for the Elmer E. Robinson Collection.

38 volumes for the Eph. Weiss Collection.

Register of miscellaneous accessions.—A total of 448 pieces was accessioned.

The following tables show the growth of the libraries during the year.

Stanford University Library

Volumes in University Library, September 1, 1942.....	581,941
Added by purchase	6,901
Added by gift and exchange	10,447
Added by binding	1,709
Total volumes added	19,057
Less volumes withdrawn	702
Net increase	18,355
Volumes in University Library, August 31, 1943.....	600,296*

Hoover Library

Volumes in Hoover Library, September 1, 1942.....	104,938
Added by purchase	2,256
Added by gift and exchange.....	2,318
Added by binding	770
Total volumes added	5,344
Less volumes withdrawn	207
Net increase	5,137
Volumes in Hoover Library, August 31, 1943.....	110,075

Lane Medical Library

Volumes in Lane Medical Library, September 1, 1942.....	98,788
Added by purchase	473
Added by gift and exchange†	1,353
Added by binding	1,136
Total volumes added	2,962
Volumes in Lane Medical Library, August 31, 1943.....	101,750

Law Library

Volumes in Law Library, September 1, 1942.....	54,495
Added by purchase	812
Added by gift and exchange	79
Added by binding	174
Total volumes added	1,065
Less volumes withdrawn	23
Net increase	1,042
Volumes in Law Library, September 1, 1943.....	55,537

* Statistics for previous years included Law Library now stated separately.

†Includes 747 volumes acquired prior to September 1, 1942, and not previously accessioned.

Expenditures for books, periodicals, and binding were as follows:

Books and periodicals

University Library†	\$23,697.89	
Felton Library‡	721.71	
Hoover Library§	3,572.19	
Hopkins Marine Station Library†	1,110.27	
Hopkins Transportation Library‡	1,487.53	
Lane Medical Library	7,915.18	\$38,504.77

Binding

University Library	\$ 3,837.80	
Hoover Library	997.14	
Lane Medical Library	2,088.91	6,923.85
		\$45,428.62

REFERENCE DIVISION

WILLARD OLIVER YOUNGS, *Reference Librarian*

The Reference and Serial Divisions were combined on August 9, 1943.

The extensive use made of the library by Army personnel has superimposed an entirely different type of activity upon our continuing normal operations.

The demand for dictionaries of minor languages, atlases, and geographical works has brought about a careful survey of our resources and the reference collections in these fields have been greatly increased as a consequence.

Mr. Vosper was president of the San Francisco Bay District of the California Library Association during the year 1942-1943.

SERIAL DIVISION

LOUISE STOCKLE, *Chief*

The current list of serials received was increased by the addition of 61 titles.

The Serial Division handled 29,670 issues of periodicals and 7,989 issues of newspapers.

BRANNER LIBRARY

KATHRYN NELL CUTLER, *Assistant Librarian*

The catalog was completed. This contained 6,842 cards at the end of the year.

The microfilm collection has steadily increased. The most important microfilm added was a reproduction of:

Hanley, Sylvanus Charles Thorp. *Ipsa Linnaei conchylia. The shells of Linnaeus, determined from his manuscripts and collection. Also, an exact reprint of the Vernes testacea of the "Systema naturae" and "Mantissa."* London, Williams and Norgate, 1855.

† Does not include purchases from school and department funds.

‡ Includes binding.

§ Does not include purchases from research funds.

Two gifts deserve special mention:

Dr. Hubert G. Schenck presented:

Orbigny, Alcide Dessalines d'. *Cours élémentaire de paléontologie et de géologie stratigraphiques*. Paris, V. Masson, 1849-52. 2 v.

Mrs. David Starr Jordan presented:

Hirases, Joichiro. *Kai sen-shu*. [A thousand varieties of shells] Kyoto, Unsodo, 1915. 3 v.

This was from the library of Eric Knight Jordan.

The library had 15,623 volumes at the end of the year.

CUBBERLEY LIBRARY

MARGARET S. WELLS, *Assistant Librarian*

The accessions included 976 volumes, 346 courses of study, 192 documents, 306 pamphlets, and 2,118 college and university catalogs.

The circulation was 50,827.

Mrs. Cubberley continued to give us valuable assistance.

The progress made upon the catalog is noted under the Bibliography Division.

ENGINEERING LIBRARY

HERTHA BENGTON, *Engineering Librarian*

The Engineering Library has completed its first full academic year.

During this period 30,262 students have made use of its facilities and 10,903 books have been lent to faculty, students, and representatives of neighboring industries.

The Executive Committee of the School of Engineering made \$1,000 available for the purchase of books.

Tau Beta Pi presented \$300 and the Student Chapter of the American Society of Civil Engineers \$50.

These and other gifts supplemented the allotments made to the various engineering departments from library funds and made it possible for us to acquire the more important current publications.

The progress made upon the catalog is noted under the Bibliography Division.

GRADUATE SCHOOL OF BUSINESS LIBRARY

EDITH F. GLICKBARG, *Assistant Librarian*

CAROLE REMELE, *Assistant Librarian*,

Division of Industrial Relations

The Graduate School of Business Library (including the Library of the Division of Industrial Relations) now contains approximately 9,284 volumes and 92,968 pamphlets.

Acquisitions for the year included 384 volumes (226 by purchase and 158 by gift), 839 annual and quarterly reports, 275 government reports and bulletins, and 854 miscellaneous pamphlets.

The library receives 538 serials, of which 315 are received by the Library of the Division of Industrial Relations.

The insurance collection was increased by the gift of 82 volumes from Flodden W. Heron, Esq.

HOOVER LIBRARY

NINA ALMOND, *Librarian*

There was a decrease in the use of the library during the first three quarters. With the establishment of the Army Specialized Training Program certain students were assigned to the Hoover Library and the use during the last quarter exceeded all previous records.

Acquisitions increased through an influx of current publications.

Nine candidates for the degree of Doctor of Philosophy and three candidates for the degree of Master of Arts carried on the major part of their work in the Hoover Library.

The reference staff received, checked, and filed 1,109 unaccessioned pamphlets, leaflets, and similar materials, prepared 1,148 cards for filing in the catalog and 5,418 cards for the various check-lists. The Curator of the Slavic Collections prepared 732 cards for the Slavic check-lists.

The library currently received 685 serials (21 Slavic), of which 101 were paid subscriptions and 124 newspapers (33 Slavic), of which 24 were paid subscriptions.

The reference staff handled 10,957 issues of serials and 9,123 issues of newspapers. The Curator of the Slavic Collections handled 1,549 issues of serials and 4,181 issues of newspapers.

The University Library provided funds to bind 157 volumes of serials in addition to those bound from Hoover Library funds.

The use made of books in the Hoover Library is indicated in the following table:

	Autumn Quarter	Winter Quarter	Spring Quarter	Summer Quarter	Total
Staff and research workers...	65	85	47	76	273
Faculty	309	176	234	348	1,067
Graduate students	246	194	183	190	813
Undergraduate students	181	132	234	15	562
Visitors	146	278	242	126	792
	947	865	940	755	3,507

LANE MEDICAL LIBRARY

LINDA TUM SUDEN, *Assistant Librarian*

The California Medical Association provided \$2,550, individual gifts largely from members of the medical profession amounted to \$1,630, and \$830 was presented by relatives, associates, and patients of the late Dr. Eric Liljencrantz to establish the Eric Liljencrantz Memorial Section on Aviation Medicine.

These gifts have made it possible to increase our collections by the purchase of all important current publications and to set aside a reserve for postwar purchases.

The circulation was 13,109. Loans to out-of-town members totaled 849. The use of books and periodicals in the reading room by student nurses and nonmembers totaled 9,845.

The following table shows the work of the bibliographers:

Volumes cataloged	1,115
Cards prepared and filed:	
Main catalog	6,051
History of medicine	140
Shelf list	1,556
Total	7,747

LAW LIBRARY

MARY S. CLARK, *Assistant Librarian*

Important additions were made to the collection of Canadian statutes.

The following periodicals were purchased from University Library funds:

La Revue Legal. n.s. v. 13-45.

La Revue de Jurisprudence. v. 13-45.

Current codes and statutes of Arizona, Florida, Kentucky, Minnesota, Missouri, New Mexico, Oregon, Utah, and Washington were also purchased from University Library funds.

The additions included 281 volumes of constitutions, laws, statutes, and codes; 10 volumes of judicial reports; 41 volumes of bar association proceedings; and 66 volumes of reports and opinions of attorney generals.

THE HOOVER LIBRARY ON WAR, REVOLUTION, AND PEACE AND

THE HOOVER RESEARCH INSTITUTE

STAFF

Ralph Haswell Lutz, *chairman* of directors and executive officer; Harold Henry Fisher, *vice-chairman* and *acting chairman* of directors, and curator, American Relief Administration Archives; Nina Almond, *librarian* and consultant in research; Suda L. Bane, research associate and archivist, Herbert Hoover Archives; Inez G. Richardson, research associate and curator, Ray Lyman Wilbur Collection on Social Problems; Maria MacCormack Hoge, director, Office of Inter-American Relations; Philip T. McLean, reference librarian; Ruth R. Perry, assistant reference librarian; Dimitry M. Krasovsky, curator, Slavic collections; Nicholas N. Golovine, research associate and curator of Russian military collections; Dr. Perrin C. Galpin, honorary curator; Lawrence Richey, curator of American political collections; Shau Wing Chan, Leland T. Chapin, Xenia Joukoff Eudin, Klára Fetter, Olga Hess Gankin, Gisela B. Josephson, Glen E. Josephson, Edward R. Mumford, Charles C. Scott, Anthony E. Sokol, Merrill T. B. Spalding, Elena Varneck, research associates; Ethel E. Emerson, assistant, Order Division; Jirina Markova Frisbie, Dare Stark McMullin, research secretaries; Mabel A.

Junkert, secretary to the chairman of directors; Hazel L. Nickel, assistant; Mrs. Helen Wallace, Mrs. Lola R. Carr, secretaries, Washington Office.

DIRECTORS

Ralph H. Lutz, *chairman*; H. H. Fisher, *vice-chairman*; Herbert Hoover, *Founder*; Ray Lyman Wilbur, Nathan van Patten, Joseph S. Davis, Eliot G. Mears, Edgar Rickard, Edgar E. Robinson, Graham Stuart, Robert E. Swain, Alonzo E. Taylor, *directors*.

RESEARCH AND PUBLICATIONS

Publications.—In November 1942, the Library published as No. 16 in its Publication Series a volume of 874 pages, entitled *The Allied Blockade of Germany after the Armistice, 1918-1919: Selected Documents of the Supreme Economic Council, Superior Blockade Council, American Relief Administration, and Other Wartime Organizations*, edited by Suda Lorena Bane, archivist, and Ralph Haswell Lutz, chairman of the directors.

A similar volume under the title *Organization of American Relief in Europe, 1918-1919, Including Negotiations Leading up to the Establishment of the Office of Director General of Relief at Paris by the Allied and Associated Powers*, also by Miss Bane and Professor Lutz, is now in press and will be published before the end of 1943 as No. 20 in the Series.

A map and study of the last free election in Germany entitled *The Reichstag Election, March 5, 1933*, by Professor Lutz and Miss Pearle E. Quinn, will be published shortly by the Stanford University Press.

Research in progress.—During 1942 funds were made available for research in and publication of materials on the problems of lasting peace. On recommendation of Chancellor Wilbur the Trustees of the University authorized the acceptance of these funds and the establishment of a Fund for Research, Publication, and Dissemination of Information upon the Problems of Lasting Peace, to be expended under the direction of Mr. Hoover, whose deep interest and exceptional first-hand knowledge of international relations were reflected in his *The Problems of Lasting Peace*, written in collaboration with Mr. Hugh Gibson. Since the publication of that volume Mr. Hoover has written eight short studies on this topic and these have been made available to students of these questions and to the general public.

Mr. Edward P. Mumford and Dr. John L. Mohr have been making a study of health problems important in the rehabilitation of the Pacific Islands. The following papers have been published: "Background to Post-War Reconstruction, Part I: Preliminary Report of Parasitic and Other Infectious Diseases of the Japanese Mandated Islands and Guam," in *American Journal of Tropical Medicine*, XXIII, 4, July, 1943; "Mosquitoes, Malaria, and the War in the Pacific," in *American Scientist*, July 1942. Messrs. Mumford and Mohr are working on the Pacific Section of the *Manual on the Distribution of Communicable Diseases and Their Vectors*, which is being published as a supplement to the *American Journal of Tropical Medicine*. This project has had the benefit of consultation with Dr. S. M. Lambert, formerly of the Rockefeller Foundation, and other experts. The reports are being used by the Schools of Military Government at Charlottesville and Columbia Uni-

versity, and have been furnished, upon request, to the Army Medical School, Military Intelligence Service, the Office of the Surgeon General, War Department, the Bureau of Medicine and Surgery, Navy Department, the United States Public Health Service, and the various universities engaged in training men for overseas duty in the armed forces.

Before leaving for field service with the American Red Cross, Dr. Charles Craven Scott completed most of his basic research in the history of medical and economic developments in California from 1917 to 1941. His "Study of Plans for Medical Care in California" has been under way since February 1942, when Dr. Scott was appointed to the Rosenberg Research Fellowship. Arrangements have been made to continue the acquisition of important material and to carry on routine work on the project under the supervision of Mrs. Richardson.

The editing of the memoirs of the distinguished Russian scientist, Professor V. P. Ipatieff, has been nearly completed under the direction of Professor Fisher.

Dr. Philip M. Burnett, now in Washington in government service, continued work on a memoir on Henry M. Robinson's activities in international affairs. This study was begun while Dr. Burnett was Robinson Research Fellow in the Hoover Library.

Advanced and graduate research courses.—The Hoover Research Institute, as in the past, offered a number of courses of instruction throughout the year, and several departments offered courses using the Library's materials. The following advanced and graduate courses were offered during the year conducted as seminars, directed research, or reading and discussion groups:

214. *Directed Reading.*—Economic aspects of public health and medical care. 3 units, summer quarter (8 weeks) (Mrs. Inez G. Richardson)

217. *Foreign Relations of Soviet Russia.*—The foreign policies of the U.S.S.R., including economic and political relations. 5 units, autumn and summer quarters (H. H. Fisher)

218. *History of International Relations since 1914.*—Studies in international political and economic relations. 5 units, spring quarter (H. H. Fisher)

220. *Censorship and Propaganda since 1914.*—Papers and discussion of the principal developments since the First World War. 5 units, autumn and summer quarters (Ralph H. Lutz and Leland T. Chapin)

221. *Directed Research.*—European totalitarianism. (Ralph H. Lutz)

225. *Seminar on Peace Settlements.*—Studies of the problems of peace and of attempts to solve them. 5 units, autumn, spring, and summer quarters (H. H. Fisher)

226. *Directed Reading in Communications.*—Study of the social significance of modern communications—radio, motion pictures, and journalism, and studies of public-opinion management. 3 units, summer quarter (Mrs. Inez G. Richardson)

227. *Economic Problems of the Pacific Basin.*—A reading and discussion course covering the period since the First World War. 5 units, summer quarter (Eliot G. Mears)

236. *Russian Revolution and the Communist Movement.* Autumn quarter (H. H. Fisher)

237. *Italian and German Revolutions and the Fascist Movement.* Winter quarter (Ralph H. Lutz)

Civil Affairs Training School.—At the request of the Provost Marshal General the University established a Civil Affairs Training School for the training of officers of the United States Army for service in military government in certain European areas liberated from the enemy. The Hoover Library became the headquarters of this school, the Reading Room was placed at the disposal of the officer-students, and books relating to the areas being studied were placed on shelves of this room where they would be easily accessible. The south exhibition room was also put at the disposal of the School for conferences and the display of maps and charts. The first class of officers reported on August 2, 1943, for a three-months course. Professor Lutz served as director during the organization of the School until his illness when Professor Fisher took over. The assistant director was Professor Lawrence G. Thomas, of the School of Education, and the secretary, Mrs. Jirina Markova Frisbie, research secretary of the Hoover Research Institute.

In addition to the student-officers of the Civil Affairs Training School, members of the 9-L group A.S.T.P. have made use of the Library's facilities in connection with their work in the European Area and Language School.

These services made it necessary to employ an additional assistant in the Reading Room.

Visiting scholars, faculty, and candidates for degrees.—The record of the number of visiting scholars who used the Library's collections during the academic year 1942-43 shows a decrease of one-half of the number recorded last year. Faculty members and Doctors of Philosophy candidates equaled the number recorded during the former year, whereas Master of Arts candidates show a decrease of four in the number recorded last year.

Visiting scholars.—Fourteen visiting scholars pursued investigations in the Library's collections during the academic year 1942-43, as follows: Peter M. Bergman, of Palo Alto, continued his research on "The German Working Classes in Wartime"; Miss Theresa Gay, of Palo Alto, investigated "Proposals for World Organization"; Joseph Buttinger, of Brookdale Farm, Pennington, New Jersey, continued his study of "The Austrian Underground Movement, 1934-38"; Professor Samuel Lepkovsky, of the University of California at Berkeley, California, carried on research on "War Nutrition"; Frederick McCormick, of Pacific Palisades, California, studied "Highways and Rail Transportation in Asiatic Russia"; Abraham Arthur Mandelbaum, of Menlo Park, California, investigated "Economic Conditions in Occupied European Countries"; Olev Maslenikov, of the University of California at Berkeley, California, continued his research on "The Russo-American Company"; Professor John Brown Mason, of Fresno, carried on his study of "The Free City of Danzig"; Dr. Georgiana Melvin, of Mills College, Oakland, California, worked on the "Marxian Influences upon the Development of Soviet Law and Penology"; Derck Roos, of Stanford University, continued his research on "Conditions in Occupied Territories during World War II"; Walter H. Rubsamen, of the University of California at Los Angeles, carried forward his investigation of "The Effect of Political Ideologies

upon Music"; Georges Sabagh, of the University of California at Berkeley, California, studied "The People of French North Africa"; Edith K. Twickler, of the University of California, Berkeley, California, investigated "Repercussions of the Zabern Incident"; Edith Waugh of Stanford University engaged in research on "Contemporary India."

Faculty.—The nine members of the faculty of Stanford University who used the Library for research were as follows: Dr. Irwin Abrams continued his research on "Society of Friends Relief Work"; Professor Thomas A. Bailey worked on his study of "The Neutrality Policy of the United States"; Professor Arthur E. Bestor, Jr., investigated "Problems of Post-War Planning"; Professor Karl F. Bode studied "Economic Aspects of Morale in German Europe"; Professor Carl F. Brand continued his research on "The British Labour Party and the Communists"; Professor Leland T. Chapin engaged in further study of "Propaganda in World War II"; Mrs. Helen Farnsworth carried forward her research on "Wartime Food Developments in Europe"; Professor Rudolph Holsti continued his work on an autobiography; Jere C. King carried on research on "The Struggle between the High Command and the Parliament for the Direction of France's War Policy, 1914-1918."

Doctor of Philosophy candidates.—Nine candidates for the degree of Doctor of Philosophy based their research on the Library's materials this year, as follows: Mother Florence M. Bourret, History Department, "The Belgian Congo, A Colonial Problem, 1920-1942"; Mother Mary Louise Bourret, History Department, "The German-Polish Frontiers of 1919"; F. H. Colombat, Political Science Department, "Proposals for Post-War Peace"; Mother Jane K. Miller, History Department, "Belgian Foreign Policy, 1919-1940"; Pearle E. Quinn, History Department, "A Study of Nazi Propaganda (1923-1933) in Germany as Seen in Newspapers, Party Publications, Posters, etc."; Mother Margaret Redman, History Department, "Reparations, Debts, and Security in Franco-American Relations, 1920-1940"; Pauline G. Staats, Education Department, "The Effects of Intellectual Co-operation of the League of Nations on Elementary Education, 1920-1940"; Dorothy L. Thompson, History Department, "Reactions of the French Press to Czecho-Slovak National Aspirations, 1914-1918"; Dallas Tueller, Political Science Department, "Administration of Mandated Territories."

Master of Arts candidates.—The three candidates for the degree of Master of Arts used the facilities of the Hoover Library this year, as follows: Charles F. Delzell, History Department, "German Occupation of Belgium, 1914-18"; Edward A. Dvorak, Political Science Department, "Problems of Proposed Polish-Czechoslovak Confederation"; Samuel Grover Rich, Jr., Political Science Department, "The Buenos Aires Conference of 1936."

THE HERBERT HOOVER ARCHIVES

Since the last report was written the developments of the war have reacted on a different division of the archives. Last year interest centered in the Food Administration; now it is in the war relief agencies. In the course of the year a number of men formerly in the C.R.B. or A.R.A. have been included in the Office of Foreign Relief and Rehabilitation Operations of

the State Department and other war organizations, with the result that several requests have been made for reports of the relief agencies of the First World War. Where duplicates were available the archivist has been glad to forward the material.

In the course of an appraisal of the public career of Henry M. Robinson, Dr. Philip Burnett had access to all archival material relating to Mr. Robinson including his correspondence with Mr. Hoover as well as the minutes and documents of the Supreme Economic Council and its shipping section in particular.

After the publication of his *The Policy of the United States toward the Neutrals, 1917-1918*, Professor Thomas A. Bailey presented the archives with a copy of the "Policy and Achievement of the War Trade Board," a report by S. B. Conger, the foreign adviser of the War Trade Board, which had been given to him by Vance C. McCormick with the understanding that it was to be deposited in the Hoover Library. Professor Bailey also presented the archives with his folder of correspondence with a number of people whom he had consulted on neutral policy.

The archives are indebted to Mrs. Jerome B. Thomas of Palo Alto for a collection of war food publications, details of which will be given in the reports gift list. The collection also included a "Médaille d'Honneur. Souvenir French Army Band Veterans. American Visit 1919," and a Brussels plaque, 1916.

During the year just past as well as during the preceding year the archivist has devoted the greater part of her time to research in the documents and to the details of publication of volumes nos. 16 and 20 in the Hoover Library Series. Some preliminary research has been done on another topic and preparations have been made for a rearrangement of Mr. Hoover's personal papers in accordance with subject groupings suggested by him.

THE RAY LYMAN WILBUR COLLECTION ON SOCIAL PROBLEMS

During this academic year the radio unit of the Collection was enlarged relatively more than other subject-matter divisions. Radio activities for the University and for the Hoover Library required the services of the curator for a considerable portion of the time.

Stanford continued its co-operation with National Broadcasting Company in the science series: "Unlimited Horizons." Eight Stanford scientists were featured and some of their research work described in dramatic stories written by Arnold Marquis.

The programs were carried nation-wide on the NBC network and were repeated by transcription on several short-wave broadcasts. Six of the scripts from the series were requested by the State Department for translation into Chinese, Portuguese, and Spanish to be used for international programs.

Mrs. Richardson helped on several smaller radio assignments, working with Columbia Broadcasting System, KGO, and the Blue Network on special forum programs in which Stanford people participated; acted as secretary for the University Radio Committee; and organized for the California Conservation Council the state-wide radio observance of Conservation Week, March 7 to 14. She was on leave from April 23 through May to attend in

Chicago the meetings of the National Association of Broadcasters; to confer with officials of National Broadcasting Company on the organization of the NBC-Stanford Radio Institute; and to participate in two sessions of the Fourteenth Annual Institute for Education by Radio at Columbus, Ohio.

On this trip a stopover in Minneapolis was arranged to obtain from Dr. J. A. Chesley a collection of personal papers dealing with relief problems in Poland during the period that Dr. Chesley served in that country with the American Red Cross.

During the Summer Quarter Mrs. Richardson assisted the Department of Speech and Drama as co-director of the NBC-Stanford Radio Institute, which is described in the report of that department.

Books, scripts, and other publications have been added to the radio unit of the Collection. An important addition was the gift from Ray C. Wakefield, Commissioner, Federal Communications Commission, of the complete file of documents on the chain-broadcasting inquiry and related legal cases.

Through the courtesy of Van C. Newkirk, Educational Director, Mutual Broadcasting System, Hollywood, transcriptions were presented of the speech by Madame Chiang Kai-shek to the House of Representatives, and of Captain Eddie Rickenbacker's talk to the Aviation Club of Los Angeles. Radio station KQW, San Jose, presented the recording of the forum discussion on February 14, 1943, in the series "What's It All About?" in which Harold H. Fisher, Ralph H. Lutz, Jozo Tomasevich, and Olga Hess Gankin of Stanford participated.

Many additions were made to the medical economics unit, and to the files on Housing and on Child Health and Protection. Dr. Wilbur and Mr. Hoover were, as usual, the principal donors to these collections.

OFFICE OF INTER-AMERICAN RELATIONS

The report of the Director of the Office of Inter-American Relations, included in this report in former years, has been made this year directly to the Chancellor and will be found on pages 399-408.

LIBRARY ACTIVITIES

An administrative report has been submitted by the Librarian to the Director of University Libraries covering the period of the academic year 1942-43. This appears in his report on page 385.

Acquisitions.—The acquisition of materials for the Hoover Library during the year 1942-43 has followed the pattern of the previous year, concentrating upon the present war, especially ephemeral and fugitive publications. Advantage has been taken whenever possible to round out the Library's collections covering the period between the two wars, and to acquire supplementary documentation for research projects carried on in the Hoover Research Institute by the research staff, and by faculty, visiting scholars, and graduate students.

Gift materials received from individuals, institutions, organizations, and government agencies, and materials acquired through exchanges with other libraries and institutions, were in excess of those recorded in previous years, and were greater in number by one-third than acquisitions by purchase. The

greater portion of the gifts dealt with the subject of the First World War and its aftermath, but valuable materials bearing on the present conflict were also among the collections contributed.

A detailed list of the gifts received by the Hoover Library during the academic year 1942-43 will be found on pages 44-46 of this report.

Materials acquired through purchase were almost double the number received last year. These purchases were made from special monetary gifts, from the regular budget, supplemented by special funds at the disposal of Dr. Nathan van Patten, director of University Libraries.

Acquisitions thus received included government documents, books, pamphlets, serials, and newspaper files, dealing with various subjects in the Hoover Library's fields.

Negotiations involving the exchange of books, pamphlets, documents, serials, and other publications carried on by the Librarian were responsible for extensive additions to the collections. These exchanges included the following organizations: *Canada*: Lawson Memorial Library, University of Western Ontario, London, Canada; *Great Britain*: University College, University Park, Nottingham, England; *United States*: Los Angeles Public Library, Los Angeles, California; Harvard University, Department of Sociology, Cambridge, Massachusetts; Woodrow Wilson Memorial Library, New York City; Carnegie Endowment for International Peace, Washington, D.C.; State Department, Division of Research and Publications, Washington, D.C.; *Union of Soviet Socialist Republics*: State Polytechnical Library, Moscow; U.S.S.R. Academy of Sciences, Fundamental Library of Social Sciences, Moscow; Society for Cultural Relations with Foreign Countries, Moscow.

In the acquisition of materials during the year 1942-43 the Chairman and Librarian received valuable assistance from directors, honorary curators, special representatives, and friends of the Library in various parts of the United States, Canada, Mexico, Latin America, the Pacific area, and in some of the European countries. Special agents also continued their efforts in certain of the neutral countries and in France.

The chairman of directors, during his trips East and to Canada, acquired extensive collections in various fields of the Library. Among these were books, pamphlets, documents, serials and maps, German National Socialist materials, and miscellaneous materials on the present war.

Serial and newspaper publications printed in fifteen languages, excluding Slavic, came in currently throughout the year from thirteen countries, the record showing a total increase of eighteen titles over last year.

Slavic serials and newspapers, issued for the most part in the United States, were received currently in approximately the same number as in 1941-42, with an increase of only one title over the former year. All of these were received as gifts or on an exchange basis.

The following is a detailed tabulation of serials and newspapers received:

	Titles received	
	1942-43	1941-42
Serials, excluding Slavic, as gifts and exchanges	539	500
Serials, excluding Slavic, as paid subscriptions	105	91
Newspapers, excluding Slavic, as gifts and exchanges	63	99
Newspapers, excluding Slavic, as paid subscriptions	21	20
(From 15 countries, in 15 languages)		
Total	728	710

	Titles received	
	1942-43	1941-42
Slavic serials as gifts and exchanges	21	19
Slavic serials as paid subscriptions	..	2
Slavic newspapers as gifts and exchanges	33	31
Slavic newspapers as paid subscriptions	..	1
Total	54	53

THE WORLD WAR, 1914-18

Additions to the Library's collections on the First World War were received in great numbers, almost exclusively as unsolicited gifts. These included many unusual items and collections. A few of these, mentioned below, will serve as illustrations:

A fourteen-page typewritten diary relating to the experiences of Dr. Durand and Colonel Gaskill during the evacuation of Kiev by the Poles, given by Colonel Charles S. Gaskill.

A collection of miscellaneous books, dealing with various phases of the World War, 1914-18, was presented by Colonel Edwin S. Bettelheim, Jr., for the Archives of the Military Order of the World War in the Hoover Library.

A portfolio of etchings of the 91st Division in the Argonne and Flanders, entitled "Pages of Glory and History," the gift of the Misses Lottie and Maud Woods.

A collection of letters, trench and camp papers, pamphlets, medals, ribbons, buttons, etc., concerned with the World War, 1914-18, and the early postwar period, given by Mrs. Agnes Wright Spring.

Miscellaneous materials, including letters, camp papers, pamphlets, leaflets, posters, forms, etc., covering the period 1914-18, the gift of Mrs. George Stockle, from the estate of Mary Emily Stockle.

A collection of books on the World War, 1914-18, gathered by Mr. William McKay, and presented by Mrs. McKay. This collection will be held in Hawaii until the end of the present war.

Military equipment used in the First World War, including a revolver, gas mask, and five steel helmets, was added to the collection by Dr. Bertha Dymont.

THE PERIOD BETWEEN THE TWO WARS

Most of the material covering the period between the First and Second World Wars received this year was acquired by purchase, but a number of valuable collections in this field were received as gifts, among them:

Peace and internationalism.—A collection of official documents and supplementary materials concerned with the Paris Peace Conference, the Supreme Economic Council, the Reparations Commission, and the First International Labour Conference gathered by Mr. Henry M. Robinson during his service with these bodies, presented by Mrs. Henry M. Robinson.

Additions to the Library's resources in this field received from Chancellor Ray Lyman Wilbur included materials of the Institute of Pacific Relations, the records of the Survey of Race Relations, and miscellaneous materials for the Ray Lyman Wilbur Collection on Social Problems.

As in previous years, Mrs. David Starr Jordan turned over a large number of books, pamphlets, periodicals, and other materials in this field.

A file of the mimeographed *Bulletin* of the Peace and Disarmament Com-

mittee of the Women's International Organizations issued in Geneva, covering the period January 1938 to June 1939, was received from Mrs. M. A. Dingman.

Important additions were made to our file of records of the National Council for the Prevention of War.

The Annual Reports of the Executive Committee of Foreign Missions, Presbyterian Church, U.S.A., covering the period 1926 to 1942 were presented to the Library by this Committee.

A collection of pamphlets and government documents covering the period of the World War, 1914-18, was secured by the chairman during his trip to Canada in November 1943.

An extensive collection of duplicate materials from the Missionary Research Library pertaining to the colonial possessions of European countries and certain countries in the Far East was also received this year. The collection included 250 issues of the *Chinese Recorder*, 1909-1921, published by the American Presbyterian Mission Press.

The publications of the League of Nations and the International Labour Office were currently received as issued.

Relief organizations.—Contributions to the Herbert Hoover Archives included materials of the American Relief Administration and the Commission for Relief in Belgium, from friends of the Library and from Mr. Hoover.

American Red Cross materials and reports of the American Red Cross Commission to Poland from April 1919 to July 1920 were presented to the Library by Dr. A. J. Chesley.

Six bound volumes of the numbered and unnumbered *Bulletins* of the American Friends' Service Committee, comprising a history of the organization since its founding in 1917, including correspondence, minutes, and other material issued by the Committee was a most important gift from the Committee.

Labor and Socialism.—Materials of interest in this field include a file of *C.I.O. News* issued by the Congress of Industrial Organizations, Volume I, No. 1, to Volume V, No. 52, December 26, 1938, to December 28, 1942, and a collection of *Trade Reports of British Columbia*, 1935-36, 1938-39, issued by the Bureau of Economics and Statistics.

Documents and secondary works on labor and socialism were extensively purchased, including official publications of the British Labour Party and the Socialist Party of the United States.

The U.S.S.R. and Communism.—An important acquisition in this field was a collection of 34 Soviet posters of the 1929-30 period, the gift of Dr. Nathan van Patten.

Additions to the Library's source and secondary materials on Communism purchased this year included official publications of the Communist parties of the United States and Great Britain and Communist international organizations.

Germany and National Socialism.—Official documents, books, and serial publications issued in Germany after 1933, valuable for a study of National Socialism, were acquired. Interesting among these was a collection of works of Dr. Emil Haushofer, founder and editor of the *Zeitschrift für Geopolitik*.

Through the efforts of Miss Almond, the Library secured an interesting and valuable manuscript by Friedrich Beer-Grunov (Heinrich Grunov) entitled: *Denkschrift über die Gründe meiner Trennung von Dr. Otto Strasser dem bisherigen Führer der Schwarzen Front*.

Other fields.—Among the new materials related to other countries was the Rouček collection of books, pamphlets, files of newspapers and serials on Czechoslovakia, Poland, and the Balkan States for the period from 1918 to 1939, a total of 516 titles, 185 of which are in Slavic languages.

Mr. James A. Healy contributed many new items to his Collection on Irish History. The *Journal of the American-Irish Historical Society*, 1900-1941, the gift of the Society, was an important addition to this Collection.

Miss Alice Baldwin Beer added to her collection on Spain a number of pamphlets and serials dealing chiefly with the Civil War. Books and other items relating to Spain were purchased.

THE PRESENT WAR

In the field of the present World War, where the chief collecting efforts were made, the acquisitions included ephemera and fugitive materials otherwise often lost or destroyed, as well as manuscripts, diaries, personal memorabilia, official documents, books, pamphlets, serials, newspapers, posters, photographs, maps, propaganda leaflets, radio transcripts, and miscellaneous materials concerned with the Allied war effort and with defense, as well as publications of organizations, institutions, and pressure groups devoted to special movements in the social, economic, and political spheres. Some of these have come from enemy-occupied countries, some from Allies and neutrals, but the greatest number have come from Great Britain and the United States.

Belgium.—Among the most important additions to the Belgian Section of the Library was the collection of official government documents of the Belgian Congo covering the period 1934 to 1941, received this year from the Belgian Colonial Office through the co-operation of Dr. Perrin C. Galpin. Other items of interest thus received were the current files of *La Libre Belgique* and *La Belgique Indépendante*, Belgian newspapers issued in London in French and Flemish.

Many current publications from official Belgian agencies in exile and from the Belgian Information Center in New York have been received throughout the year.

Canada.—The chairman of directors acquired collections of various materials dealing with the Canadian war effort, especially in Western Canada. These include government documents, pamphlets, serials, posters, and maps. Arrangements were also made for the acquisition later of additional material.

Czechoslovakia.—A useful collection of books in the Czech language was received from Dr. Rouček. These include books issued in Prague up to 1940 and books by Edvard Beneš in London in 1941.

France.—Professor Nicholas M. Golovine, curator of Russian military collections, and research associate, now in France, is continuing to collect ephemera on the present war. These are being held for shipment at the close of the war. A few French newspapers have, however, been received.

Great Britain.—In London, a very comprehensive collection of British war materials is being assembled for the Library. This includes official British documents, official publications of governments in exile with headquarters in London, books, pamphlets, newspapers, serials, leaflets, posters, and current publications of British wartime organizations and institutions.

Mexico and Latin America.—Señor Rafael Heliodoro Valle, the Library's curator for Mexico, has continued his collecting activities in Mexico and Central and South America.

Sweden.—In Sweden, Dr. Ebba Dahlin is directing the collecting of materials concerned with Swedish neutrality and is holding these documents in storage for delivery at the end of the war.

Switzerland.—Some documents and newspapers have been received from Switzerland.

Turkey.—Current files of several Turkish newspapers, covering various shades of public opinion in Turkey, have continued to arrive throughout the year.

United States.—In December 1942, Chancellor Ray Lyman Wilbur accepted the chairmanship of a faculty committee which has volunteered to collect material for the Hoover Library relating to the Pacific area. This committee includes Professors Chapin, Bradley, Davis, Kirkpatrick, Mears, Reynolds, Robinson, and Lutz.

Dr. Chapin, now Lieutenant Chapin, U.S.N.R., is at present on duty in the Pacific area and when opportunity offers is continuing to collect for the Library. He has already given funds and materials for a collection on Hawaii which is being held there for later shipment.

An important collection on the United States and the present war was presented to the Library by Dr. Nathan van Patten, director of University Libraries. This includes materials issued by national, state, and local civilian defense organizations, files of current serials, organs of the various Japanese assembly and relocation centers in the United States, and miscellaneous ephemera.

Representatives and friends of the Library in Washington have made many contributions to our collections on the United States. In January 1942, Dr. Waldo Chamberlin, then Research Associate on leave, acting for the Library, made an arrangement with the Library of Congress whereby duplicates of fugitive materials collected for the Library of Congress shall be sent to the Hoover Library or, in the case of confidential matter, held for us until the end of the war.

Dr. Perrin C. Galpin, honorary curator and special representative, Mr. Lawrence Richey, an honorary curator, Mr. Walter M. Gibb, a special representative, and Dr. Julius Klein, an old friend of the Library, have been responsible for many acquisitions of great interest and value.

Many Stanford men now in the service are gathering for the Library such items of historical value and interest as come their way. Lieutenant W. L. Perry, now overseas, is gathering materials on the present war in North Africa. Corporal Kay I. Kitagawa is collecting American source material and contemporary propaganda in the Pacific area and the Orient. Lieutenant Jack Marsh Laughlin has been authorized to collect publications of the Public

Relations Office of General Headquarters in the Southwest Pacific. Lieutenant M. A. Prado, U.S.M.C., will collect papers, pamphlets, or publications covering the attitudes of countries to which he is assigned. Professor Ronald Hilton is collecting materials for the Library during his sojourn in South America. Most of these collections will be held in storage until the end of the war.

Among the interesting contemporary publications issued in the United States were many files of foreign language newspapers published currently in the United States covering almost every phase of public opinion among these immigrant groups in this country. Interesting from another point of view are the publications of the Civilian Public Service Camps for Conscientious Objectors covering their activities in the United States.

Many societies and individuals interested in the organization of peace and postwar planning have contributed their publications.

The Tower.—Hundreds of persons have visited the Library and the Tower during the year, among them many from Europe, South and Central America, and many sections of the United States. Under special arrangements visits have been made to the top of the Tower by a number of groups of 50 to 100 persons. These groups included soldiers from the 9-L and Star units and from neighboring posts, Stanford pre-registration groups, Stanford freshmen and seniors, groups from the Graduate School of Business, Stanford ambassadors, guests of the University, and members of various conferences and committees meeting at Stanford and on the peninsula.

Carillon.—In July 1942, Mr. James Lawson, formerly the carillonneur, entered the United States Army, and since then the Library has been without a regular carillonneur. On a few special occasions, recitals were given by Dr. Warren D. Allen, organist of Stanford University, and by Dr. D. Sterling Wheelwright, acting organist. On July 13, 1943, Private Maurice John Forshaw was authorized to play the carillon on a special week-day and Sunday schedule.

The exhibits.—Twelve special exhibits in addition to the permanent exhibits were displayed in the Library's exhibition rooms during the year:

Military occupations since 1914:

German military occupation of Belgium, 1914-1918.

German and Austro-Hungarian military occupations in various countries of Europe, 1914-1918.

American forces in Germany, 1918-1923.

Military occupation of territories which later became mandates administered under the League of Nations.

Military occupations by Germany and Japan in the World War, 1939-

The Commission for Relief in Belgium, 1914-1919.

American Technical Advisers to the new governments of Austria, Czechoslovakia, Poland, and Yugoslavia following the World War, 1914-1918.

The United States Food Administration in the World War, 1914-1918.

United States and British posters of the World War, 1939-

Hand-drawn and hand-colored plates depicting the flags of all nations.

Colored plates of British regimental uniforms.

Therese Bonney's photograph collections:

War History Written with the Lens—Finland.

War History Written with the Lens—France.

Personnel.—On June 29, 1943, Professor Lutz was taken seriously ill and confined to the hospital for several weeks. During his illness and convalescence the vice-chairman of directors has carried on the duties of the chairman.

Chancellor Ray Lyman Wilbur is now occupying rooms on the eleventh floor of the Hoover Library building, adjoining those of Mr. Hoover.

Miss Ethel E. Emerson was granted the title of Order Librarian, Hoover Library, and was listed as an officer of administration of Stanford University.

Mrs. Ruth R. Perry was reappointed Assistant Reference Librarian and listed as an officer of administration of Stanford University.

In July 1943, Mr. Edward Philpot Mumford was appointed Research Associate in the Hoover Research Institute for the academic year 1943-44.

In August 1943, Dr. John L. Mohr was appointed Research Associate in the Hoover Research Institute for the academic year 1943-44.

On August 31, 1943, Miss Joan V. Bondurant and Miss Maurine L. P. Patterson were appointed as Research Assistants in the Hoover Research Institute for the academic year beginning September 1, 1943.

On June 29, 1943, Dr. Perrin C. Galpin, of New York City, was appointed Honorary Curator for the academic year 1943-44.

H. H. FISHER

Acting Chairman of Directors

OFFICE OF INTER-AMERICAN RELATIONS

As was pointed out in our Annual Report for 1942, the function of this office is to mold public opinion in order to secure its informed, active participation in building a permanently united hemisphere.

Last year it was felt that in carrying out its objective a simultaneous effort should be made to contribute to the inter-American war effort by emphasizing the nature of the hemisphere's military, economic, and juridical collaboration.

The purposeful concern of the public with inter-American affairs is significantly reflected in the fact that the information disseminated with respect to wartime activities of the Americas has not served as an end in itself, but only as a stimulus to the variety of endeavors in which the public has sought the assistance of this office. We believe this fact is evidenced in the following Annual Report.

LITERATURE COLLECTED FOR REFERENCE PURPOSES

Our collection of materials has been greatly enlarged so that it is possible to give the public up-to-date information of an even more varied character than heretofore. The following organizations supply most of these materials: Pan American Union; Office of the Co-ordinator of Inter-American Affairs;

Carnegie Endowment for International Peace; Institute of International Education; Institute of Latin-American Studies of the University of Texas; School of Inter-American Affairs of the University of New Mexico; Hispanic Foundation of the Library of Congress; Press Division of Mexico's Foreign Office; Instituto Chileno Norteamericano de Cultura; Ministries of Education; United States Embassies; Foreign Offices; Tourist Commissions; Universities of Mexico and Chile; 20 daily newspapers and monthly magazines published in the United States and in Latin America.

Letters were sent to government agencies of the other Americas requesting literature originating within those countries and clearly indicating what each nation considered the most important aspects of its war effort. Almost all of the governments have responded favorably to our request and a representative collection of such documents now forms a part of our reference materials.

LITERATURE FOR DISTRIBUTION TO THE PUBLIC

Lot quantities of literature covering broad fields of interest in inter-American affairs have been received from the following sources: Office of the Co-ordinator of Inter-American Affairs; Latin-American Division of the Department of Labor; Office of Foreign Relations, United States Department of Agriculture; Middle Americas Information Bureau. (See also section entitled "Collaboration with the Other Americas.")

About 300 schoolteachers and 1000 other persons have received collections of the material sent this office for distribution. Two large shipments of literature were made, one directly from this office for the Institute of International Relations at Mills College, and the other, filled at our request by various agencies in Washington, to the Arizona State Teachers College for use in their Inter-American Workshop. Smaller lot shipments of literature have been made to civic and church groups and to soldiers stationed at Stanford.

Special mention should be made of the study prepared by Miss Mary M. Cannon of the Latin-American Division of the United States Department of Labor entitled *Women Workers in Argentina, Chile and Uruguay*. This booklet has been broadly distributed and has aroused unusual interest.

As our literature has increased and the demand for opportunities to study it has become greater, our office is much in need of the services of a bibliographer with a knowledge of Spanish and Portuguese to classify and circulate our source materials and to mail out the literature we have available for distribution.

ASSISTANCE TO NORTH AMERICAN STUDENTS

Although the University's enrollment has been somewhat reduced in the year just closed, there has been a gratifying increase in the number of students who wish to undertake studies covering certain phases of Latin-American civilization, who are planning to carry out careers in inter-American affairs, and who, upon graduation, seek employment in the field of inter-American affairs.

This year 19 term papers have been written under our guidance, 8 conferences have been held with parents and 10 with students relative to the

courses of study they should undertake in preparation for professional inter-American work after graduation, and approximately 25 Stanford students have sought assistance in procuring employment in this country or in Latin America; every assistance was given the 4 Stanford graduates who secured appointments in Latin America: literature of specific value to them was secured for their permanent use, sources of future collaboration listed, and all possible background information given to them.

University of Mexico Summer School.—Out of some 60 students who sought assistance in making plans to study in Mexico, 36 attended the Summer School sessions of that University. Of these, one is a student from the University of California, and one from the University of California in Los Angeles.

The courses of study offered in the Mexican University were evaluated and, in suggesting programs of study, consideration was given to each student's need with respect to his complete university program.

The office obtained for the group hotel reservations at El Paso for the overnight stop there, round-trip railroad transportation via various routes, and Tourist Cards issued by the Consulate General of Mexico. Our students were placed in homes where they would have full opportunity to speak Spanish. Schedules of week-end trips were prepared for each one. Mimeographed bulletins were distributed to them listing the names of Mexican doctors, dentists, hotels, clothing they would need, and wartime restrictions they would be expected to comply with in Mexico. Literature was given them in advance which would guide their attitude and behavior toward the country to be visited, as well as help them to understand something of Mexico's history, economic and social problems, etc. Every effort was made to insure that this group would derive more than purely academic values from their visit to Mexico. For the assistance given in securing necessary information the office is especially grateful to Mrs. Stevenson Guizar, Registrar of the Summer School in Mexico, Mr. F. N. Puente, San Francisco Agent of the National Railways of Mexico, the Institute of International Education, and various departments of the Pan American Union.

Discussion contest held by the Office of the Co-ordinator of Inter-American Affairs.—The office collaborated with the Department of Speech and Drama in preparing students to participate in the national discussion contest on inter-American affairs. The Director was one of the judges who selected the papers that were submitted to Washington, on the basis of which one of our students was chosen to participate in the semifinal contest held in Denver. The paper, entitled "Hemisphere Collaboration in Combating the Fifth Column," was prepared from materials obtained in the office such as reports of the Inter-American Juridical Committee, the Inter-American Defense Board, articles by Richard Behrendt, Graham Stuart, and J. A. Normano, and a number of pertinent books. Stanford's candidate placed second out of the group of contestants from all Western colleges and universities.

American Friends' Service Committee seminars.—This office accepted the task of selecting from Stanford's student body 15 candidates for attendance at the three seminars held in the East under the auspices of the American Friends' Service Committee. One of the seminars dealt with the Western

Hemisphere in relation to world problems. The Stanford Latin-American students who participated in the International Student Service Assembly last fall were included in the list of candidates submitted to the American Friends' Service Committee. The complete group comprised North American, European, Oriental, and Latin-American students who have demonstrated a consistently international viewpoint in their thinking about economic and social problems of the postwar, who have had experience in public speaking, or are majors in the Departments of Political Science or Economics, have lived in other countries or have participated in similar congresses. After the candidates had been selected, the file was turned over to Mrs. Irwin Abrams, who acted for the American Friends' Service Committee in arranging attendance from the West Coast area.

Other seminars.—During the Summer Quarter the Director on various occasions spoke to seminar groups conducted by the School of Education. These discussions centered for the most part around the relative merits of various approaches to inter-American understanding.

Social Studies Workshop.—This workshop, conducted by the School of Education during the Summer Quarter, was made up of educators from all over the United States and included six Negro Fellows of the Rockefeller Foundation. Because the needs of this group varied so greatly it was necessary to hold several individual conferences with each one in order to render the most practical assistance possible.

For example, for a young man who wished all possible information about Haiti and the social, economic, and political status of the Negro in the other Americas, and who desired to establish collaboration with Negroes outside of the United States, a special bibliography was secured from the Pan American Union and sources of collaboration were given him, together with a supply of materials for classroom use.

A second member of this group was a Negro normal school teacher who desired and obtained information concerning women in industry and agriculture in the other Americas. Literature published by Miss Mary M. Cannon of the United States Department of Labor was given her and she was made familiar with the publications of the Division of Social and Labor Problems of the Pan American Union. She was likewise informed of other sources in this country to which she might apply for material of specific interest to her.

A third member of this group was an elementary school teacher from Colorado whose students include a large percentage of Mexican children. She was given a list of organizations in this country particularly concerned with her problem which included the School of Inter-American Affairs of the Universities of New Mexico and Texas, the Los Angeles Office of the Co-ordinator of Inter-American Affairs, and the Rocky Mountain Council in her own state.

ASSISTANCE TO LATIN-AMERICAN STUDENTS

The usual intimate contact has been maintained with the Latin-American students at Stanford. They have been helped to obtain part-time work; their courses of study at Stanford have been planned; assistance was given to two

graduate students in obtaining admission to the Harvard University Schools of Architecture and Medicine; three applications for scholarships have been made on behalf of Latin-American students for the forthcoming academic year. Prospective students have spent the day on the campus with the Director who has gone into their needs in great detail.

Three students were selected and prepared to participate in a long-wave broadcast of the Inter-American Forum of the Air, a weekly discussion broadcast of the Columbia System. The topic of the program was "Certain Problems in Inter-American Economic Collaboration."

Through the efforts of this office three of our Latin-American students were appointed by their respective governments to act as official delegates to the Congress of the International Student Service, held in Washington, D.C., during last September. A travel scholarship was obtained for each student, which enabled the three to travel to Washington. The Director of this office had occasion to be in the capital when the Congress took place and helped the boys at the Congress itself, as well as in sightseeing trips and in arranging a return to Stanford over a route that permitted them to see much of our country.

GENERAL ASSISTANCE TO THE PUBLIC

An increasing number of persons call daily at the office requesting information of all kinds. The visitors have included persons from the neighboring states of Washington, Oregon, Colorado, New Mexico, and Arizona, who have heard of this office and made the trip to Stanford in order to become oriented in this field of work or to obtain specific information. On such occasions, the visitors have been made familiar with the official sources of collaboration in this country that are available to everyone and the materials that are of most practical use in their particular case. All such callers are placed on our mailing lists to receive assistance in the preparation of Pan-American Day programs and to receive whatever material we prepare which might be of particular interest to them.

People call upon us for assistance in securing employment in the inter-American field. They are given a careful interview to judge their qualifications and are then referred to local or Eastern organizations who might be interested in obtaining their services. This group includes both inexperienced young people, business and professional groups who are qualified for specialized work, and in a few instances persons with unique qualifications whom we especially strive to place where they can make the best contribution.

A conservative estimate is that in addition to regular local callers some 200 out-of-town persons have visited the office during the year.

Bolivian-American Labor Commission.—At the request of Professor Theodore Kreps, Consultant on the Board of Economic Warfare, this office agreed to select from the Western area 30 persons who would be considered for appointment under the Educational Section of the Bolivian-American Labor Commission's program for social improvement.

Given the multiple factors to be considered from the Bolivian standpoint in carrying forward successfully the proposed program of elementary and vocational training in Bolivia, the candidates were chosen with respect to the

following qualifications: (1) fluent knowledge of Spanish, experience and/or training in teacher education theory and practice; (2) a clear understanding of social conditions and needs in at least one other American nation and a sound understanding of the extent to which political and economic factors enter into problems of education in the other Americas; practical experience in social service work and a proven record of resourcefulness in circumventing limitations imposed by economic stringency; a genuine concern with the humanitarian aspect of education.

The collaboration of the following people was obtained in securing the names of candidates to be interviewed: Dr. Carlos García Prada, University of Washington; Dr. Torres-Rioseco, University of California; Dr. Ben Cherrington, Rocky Mountain Council, Denver, Colorado; Dr. J. Edgar Fisher, Institute of International Education; Dr. Joaquín Ortega, School of Inter-American Affairs, University of New Mexico.

Although some 60 applicants have been interviewed, only 14 names have been submitted to the Board of Economic Warfare. These, however, are thoroughly qualified from every standpoint. During Dr. Donoso Torres' visit to Stanford, this matter was discussed with him. He was so well impressed with one of the candidates whom he met at Stanford that he has applied to his government for permission to appoint him directly to the Bolivian Board of Education.

Pan-American Day.—The mailing lists of schoolteachers and civic and church groups in California and neighboring states were revised and brought up to date during March. A collection of the circulation materials above-described was sent to some 600 persons. For schoolteachers each package included also a mimeographed booklet containing two sketches by B. Cunningham Graham, which had been especially selected for classroom reading because of their vivid portrayal of some of the vital forces that have gone into the making of America. The sketches were illustrated with copies of water-color drawings by the Uruguayan artist, Miguel Benzo. The special material prepared by the Pan American Union was particularly useful in making up about fifteen individual programs for schools. Local schools and civic groups were visited and specific suggestions given for commemorating the day.

The Latin-American students at Stanford gathered for a *criollo* dinner at the Director's home and heard the radio broadcast which originated at the Pan American Union and which prompted considerable constructive discussion.

Lectures given by the Director.—Five lectures have been given this year to various groups whose average audiences have numbered 100 persons. One discussion dealt with the structure, function, and Preliminary Report of the Inter-American Juridical Committee. The juridical and moral influence of this organization was emphasized. A second lecture concerned women of the other Americas in the professions, in business, in industry, and in agriculture, and the legislative measures that exist and are pending with respect to women's welfare. A third talk was devoted to postwar food problems and referred especially to the work of the Inter-American Agricultural Institute. An additional lecture, given twice, was entitled "What Inter-American Collaboration Means to You, American Citizen." This talk emphasized the fundamental

identity of ideology among the nations of America, and the imperative necessity of making this fact basic to our common endeavors in developing a united viewpoint whose influence will be felt in the postwar.

COLLABORATION WITH THE OTHER AMERICAS

In spite of continued difficulties in reaching the middle classes of the other Americas who vary so greatly within each nation in respect to size, intellectual development, and degree of influence they can exercise, the office has strengthened and enlarged its sources of collaboration in the other Americas. This has been achieved during the year just closed in spite of limitations of transport facilities which have, indeed, presented a handicap. For example, air-mail correspondence from writers and publishers throughout Latin America has frequently advised that materials are being shipped which have never reached us, so that the supplies of literature published in English and destined to be distributed by us have in some cases ceased entirely; in other cases they have been greatly reduced because paper shortages have made it impossible for adequate lots to be printed. However, it is gratifying to know that there exists a widespread and sincere willingness to collaborate with this office.

During the year Dr. Lilo Catalán, owner and publisher of *La Revista de Buenos Aires*, published the Spanish version of Dr. Wilbur's radio talk which in 1942 initiated the series of short-wave broadcasts entitled "Stanford University Salutes the Americas." Dr. Catalán also published in his latest issue of *La Revista de Buenos Aires* our translation of Stanford's handbook descriptive of University life, entrance requirements, and degrees offered. It is hoped that this handbook will have practical use for all Latin-Americans who contemplate studying in the United States because care was taken to add several pages explaining campus practices, colloquialisms of language, basis of evaluating credits, entrance requirements, and nature of degrees granted which are general among universities of this country.

Collaboration with the press of Latin America is also being carried out as follows: an article by Bertram Fowler ("Food, Jeeps, and Co-ops," *Common Sense*, May 1943) which has special application to Latin America has been translated and will be distributed to editors of newspapers and magazines with the request that it be given circulation in their countries. The article which *Veritas* of Buenos Aires translated and published for Dr. Richard Behrendt, entitled "Futuro Económico Americano," was recirculated in Latin America; a second of Dr. Behrendt's reports is being translated, as is the *Report of Proceedings of the San Francisco Bay Area Inter-American Institute* (see page 407) and will also be given distribution.

Haya de la Torre's *Message to the Nation*, of February 1943, was translated by this office and given distribution in this country.

Leading universities of the Bay area participated during November in a series of short-wave broadcasts to Latin America. These were designed to honor the University of Chile, which was celebrating the centenary of its existence as a state university. This office prepared a broadcast in collaboration with Dr. Ray Lyman Wilbur and the University's Division of Music. Our objective was to stress the importance of an international atti-

tude in education and to recognize the University of Chile's traditional adherence to this concept. It is regrettable that the publicity prepared by the Co-ordinator's office covering this event did not reach Chile sufficiently in advance. However, script of our own program, sent ahead to the Instituto Chileno-Norteamericano de Cultura, was copied and distributed to the Santiago press, the University of Chile, our Embassy, and members of the Instituto.

This program served to stimulate interest in Stanford's section of the United States university exhibits which were on display at the time in the University of Chile, and several inquiries for catalogues and other information reached us subsequently.

Unfortunately more sustained interchange with the other Americas has not been possible because the need here is primarily to keep our friends supplied with worth-while translations for publication in Latin America, and these we are unable to make because of our very limited staff.

LATIN-AMERICAN VISITORS TO THE CAMPUS

As has been set forth in an earlier report, the objective of this office in bringing to the Stanford campus prominent visitors from Latin America is (1) to give the guest every opportunity to explore Stanford's resources in his own field of work, (2) to give members of the Stanford faculty the opportunity of knowing what is being done in Latin America in their particular field, (3) to establish fruitful collaboration through every possible channel.

Latin-Americans who have visited Stanford this year include: Jorge Zalamea, Colombian writer; Carlos Ros, Paraguayan Delegate to the Pan American Child Welfare Conference; Manuel Seoane, Chilean writer and critic; Dante de Laytano, Professor of American History at the University of Porto Alegre, Brazil; Ezequiel Martínez Estrada, Argentine author and professor at the University of La Plata; Raúl Silva Castro, Chilean writer; Emilio Oribe, Uruguayan poet and Professor of Literature at the University of Montevideo; Jorge Fidel Durón, President of the Honduran Institute of Inter-American Culture at Tegucigalpa; José Nucete Sardi, Director of Cultural Affairs of the Ministry of Education of Venezuela; Francisco Villagrán, Professor of Biology, University of Mexico; Clementina Otero, Director of the National Children's Theater in Mexico; Alberto Arca Parró, Director of the Census of Peru; Vicente Donoso Torres, Director General of Education in Bolivia; Julio Larrea, former Chief of Primary and Normal Education of Ecuador; editor of *Nueva Era*.

Experience has shown that the interest of our visitors is seldom confined to their professional activities. It has often been possible, therefore, to be of practical assistance in more than an academic way. To take one example, Dr. Alberto Arca Parró, who is Director of Peru's Census, is especially concerned with social legislation and food economy in his own country. After discussing with the Director of this office some of the social legislation needed in Peru and the dangers which Peru's economy faced as a result of concentration of effort on a stimulation of its mineral production, it was arranged to have Dr. Arca Parró confer with Professor Karl Brandt of our

Food Research Institute, and with Professor Stuart, Consultant on the Board of Economic Warfare, from whom Dr. Arca Parró obtained needed information. This office then forwarded to the Department of State a report which Dr. Arca Parró had prepared but which had not previously been submitted to that Department. We have since been informed that Dr. Arca Parró's report was useful in working out certain phases of the Peruvian-United States SCIPA program (Servicio Cooperativo Interamericano de Producción de Alimentos).

SAN FRANCISCO BAY AREA INSTITUTE ON INTER-AMERICAN AFFAIRS

During the month of July a two-day Institute on Inter-American Affairs was held in San Francisco which represented the co-ordinated effort of individuals and institutions in this region with a concrete contribution to make toward hemispheric unity. Dr. Graham Stuart, professor of political science at Stanford, acted as chairman, and the Director of this office planned and co-ordinated the undertaking, the first of this kind in northern California.

A careful survey was made of the resources available in this region. It was found that eight major areas could be considered in their relation to hemisphere war needs and to postwar problems. It was possible, therefore, under the title "The Americas in the War and in the Peace," to develop the following thesis:

With due recognition of the efforts being made on every hand to create a better world in the Americas, it is a realistic fact that poverty, disease, hunger, and social injustice are the lot of the preponderant masses of our peoples. The war has unavoidably accentuated these conditions for most of them. On the other hand, the Americas are expected to take an important part in solving the world's postwar problems.

Our Institute, therefore, considered the press and cultural relations which are the sound mediums through which understanding of all problems can be gained, and laid before the public our acute needs in medicine, industry, agricultural economy, and labor.

Our hemisphere's needs of improving the well-being of our peoples were then considered in the light of postwar problems. Far from developing a negative theme here, it was emphasized that the Americas are in a pre-eminently advantageous position to take a leadership role in postwar planning because of their unique experience in international living, their vast resources, their freedom from the devastation that the rest of the world is experiencing, their common history of struggle to perfect democracy, and the great similarity of their aims with respect to world relations.

Stanford's Chancellor, Dr. Ray Lyman Wilbur, in his keynote address which opened the Conference, set forth the Institute's thesis above outlined.

A Report of the Proceedings of the Institute is being translated into Spanish and will be published and circulated in Latin America.

War conditions unavoidably affected the meeting, three Latin-American out-of-town speakers having been prevented from participating on that account, and attendance of the public having been limited to some six hundred on each of the two days as against the one thousand or more it was anticipated would be present. Two defects, attributable to the fact that this was a

first experience, were apparent: (1) advance publicity was not arranged for sufficiently ahead, and (2) some of our group need guidance in securing better representation of the Latin-American viewpoint, which is important since sound relations between the people of the Americas must be established before we may profitably consider the ramifications of inter-American effort.

In spite of the weaknesses above mentioned, public opinion indicates that our first Institute should be made a yearly feature of inter-American work in this area. The key speakers, Mr. John McClintock, Assistant Co-ordinator of Inter-American Affairs, Mrs. Concha Romero James, Chief of the Division of Intellectual Co-operation of the Pan American Union, Mr. Charles Morrow Wilson of the Middle Americas Information Bureau, Dr. Germán Arciniegas, former Minister of Education in Colombia and Professor Graham Stuart of Stanford, all have volunteered to assist us again in similar undertakings.

It is felt that a lasting contribution made by the Institute has been to inform the public of the many sources of information on inter-American affairs available in this area. This fact is reflected in the inquiries which have come to various of our participants and in the projects for constructive work which are being implemented through this office, and which will be reported upon in the next *Annual Report*.

The Director wishes to take this occasion to express deepest appreciation to the chairman of the Institute, Professor Graham Stuart, for his unfailing support and expert guidance in overcoming the many difficulties that arose in the course of organizing the conference, and to Dr. Jacob Geiger and Dr. Grace McCann Morley for their efficient and valuable collaboration in setting up the Medical and Art sections. To all our participants we are indebted for their generous spirit of co-operation in insuring a high standard of production.

Throughout the year the faculties of the Departments of Romanic Languages, English, Speech and Drama, Political Science, and History, and the Schools of Education and Engineering have been especially generous in contributing to the success of our work.

To our Chancellor, Dr. Ray Lyman Wilbur, deep and lasting gratitude is expressed for the inspiration and guidance he has always given to our efforts.

MARÍA HOGE, *Director*
Office of Inter-American Relations

DEAN OF MEN

The impact of the war was reflected in every phase of student life during this year. A steady flow of ever-changing events caused continual confusion and uncertainty. A more stable situation evolved during the summer quarter, so that with the beginning of the autumn quarter 1943, less hectic conditions in student life should prevail.

Early in the autumn quarter 1942, military recruiting activities were at their highest. In November, a joint Army-Navy-Marine Corps College Procurement Committee presented various reserve enlistment opportunities to the men students.

Accurate figures are not available concerning the number of enlistments. It is estimated that between 60 and 75 per cent of the men students were in some branch of the service. The following table gives a break-down of enlistments at the end of the winter quarter. No information was available on the number of enlistments in the Naval Air Corps or specialized services such as meteorology, Merchant Marine, language schools, radar, and others.

Navy V-1	306
Navy V-7	144
Marine Corps	112
Army Air Corps	112
Enlisted Reserve Corps.....	312
R.O.T.C. Advanced	201
R.O.T.C. Basic	363
Total	1,550

Late in January the Army Air Corps notified all enlistees to be ready for immediate call. The students involved were faced with the decision of withdrawing immediately or continuing in registration until they actually received orders to report. Few were called before the end of the winter quarter. Many were able to finish the spring quarter. Some even had not reported at the end of the summer quarter. The general effect, however, was to disrupt the stability of these students and adversely influence their scholarship.

The students enlisted in the E.R.C., except those preparing for medicine and those in second-year advanced R.O.T.C. who would graduate or finish R.O.T.C. training at the end of the spring quarter, were called to active duty after the close of the winter quarter. The first-year advanced R.O.T.C. has now been returned to continue University work at the opening of the autumn quarter 1943.

The Navy, as previously announced, called all V-1 and V-7 candidates (except those who could graduate at the end of the summer quarter) to active duty on July 1. A few V-7 men were invited to report before the end of the spring quarter. These were students who had fulfilled their major requirements, who had good records, and who would graduate in June. These men were all granted their degrees.

Before present arrangements with the War Department for co-operating in the Army program were consummated by the University, an agreement was entered into with the Navy. As a result, students were asked to vacate Branner Hall for the Navy. The agreement was canceled after this disruption had been caused. Toward the end of the winter quarter, it was again necessary to ask the students to vacate Branner. Both of these changes came just at final examination time. The hall was not used until a much later date. Toward the end of the spring quarter, Toyon Hall was vacated. This meant that some boys had to move three different times.

MEN'S RESIDENCES

The Encina Club gave a reception at Encina Hall early in the autumn quarter in honor of Dr. and Mrs. Wilbur and Dr. and Mrs. Tresidder and to celebrate the remodeling program which had been completed during the summer of 1942.

At the end of the spring quarter, Branner, Toyon, Sequoia, and Encina Halls were turned over to the Army. The University leased all fraternity houses to operate as dormitories. Twelve fraternity houses were occupied by civilian students during the summer quarter. These halls were designated by the names of presidents of our country.

Resident assistants were appointed to supervise these dormitories and to act as advisers to the students in the organization of their activities. Students were assigned to halls in accordance with their major interests. Separate facilities were provided for graduate students. The new Lower Division students were divided into four groups—social science, science, engineering, and medical students. Each group occupied a separate hall.

The shortage of labor for janitor work and gardening necessitated the co-operation of the students in assuming a part of the responsibility for this work. For the most part the students entered heartily into the job of relieving the emergency.

REGISTRATION OF HIGH-SCHOOL SENIORS

When the draft age was lowered to eighteen years, it became apparent that the University must change its admission requirements if our youth were to have an opportunity to prepare adequately for the war effort. The average age of Stanford freshmen was eighteen years two months. As a consequence registration was opened to well-qualified students who had completed their junior year in high school.

As a result of this plan, which was approved by Dr. Wilbur just before the opening of the winter quarter, fifty-four boys were admitted. Many educators questioned the advisability of Stanford's drastic move on the grounds that these students were too young, were not ready for college work, and that their adjustment to the University environment would be difficult if not impossible.

The records of the original fifty-four were studied carefully and were compared with the records of the forty-five high-school graduates who entered at the same time. The following report to Dr. Wilbur represents the results of this study.

DEAR DR. WILBUR:

March 31, 1943

You may be interested in a brief comparison of the scholarship records of the students who were admitted without high school graduation for the winter quarter with the records of the high school graduates who were admitted at the same time.

There were approximately fifty students in each group. Of the high school seniors, twelve made "B" averages or better; thirty-three others had plus records for the quarter; nine made below a "C" average, and five of these went on probation. It is interesting to note that of the five on probation, one entered three weeks late and was ill with the measles after arriving and another was in an advanced course in economics.

Of the high school graduates, there were twelve who made "B" averages or better; fifteen others whose records were above a "C" average; and eighteen who made below a "C" average. Fourteen of the last group went on probation.

It is very refreshing to see the fine records which the high school seniors made. They bear out earlier observations that this is a serious group of boys who are here for business and who appreciate the opportunity to start their University work before graduating from high school.

I thought you might be interested in this general review.

Cordially yours,

JOHN W. BURN,
Dean of Men

Members of the faculty who taught these students were canvassed in order to learn their experiences with these young people. Without exception the comments were favorable. One letter which was received from a member of the English Department was of particular interest. Excerpts from this letter follow:

"... as I understand, most of the members of this class are either first-quarter or second-quarter freshmen—men who did not complete the last year of their high-school work.

"I cannot recall ever having had a class that displayed better morale than this one. I have never had a class sharper, more on their toes, more willing to learn, more punctual in their attendance and in their work.

"I am very fond of teaching, but I am not always successful with it. I think I can say I have been very successful with this class; and that I have been successful is due more to the members of the class than it is due to me."

A follow-up of these students during the spring and summer quarters has been made, and it has been refreshing to note that the good records of the winter quarter have been maintained.

Likewise those high-school seniors who entered at the beginning of the spring and summer quarters have made comparable records. Of particular significance is the record of the twenty-nine who entered at the beginning of the summer quarter. Of these only three went on probation, five made "B" averages or better, and nineteen made "C" averages or better. Two did not complete the quarter's work because of illness.

Subsequent developments with respect to the need for trained minds in critical occupations and the provisions made by Selective Service National Headquarters for deferment of students in training for these critical occupations have demonstrated the wisdom of what at first appeared to be a radical move. It is noteworthy that many high-school principals are now advising their outstanding students to follow this plan.

UNIVERSITY SHORT TERM

In order to make it possible for men who were planning to enter Stanford in the spring quarter to qualify for enlistment in the Naval Reserve before March 15, 1943, a short course was established during the winter quarter. The fact that registration for the spring quarter was not until March 29 made this action necessary, since a boy had to be registered in college as one of the prerequisites for this particular Naval enlistment.

Although the course was organized on short notice, largely at the request of the students themselves, forty-two boys availed themselves of the opportunity. The course was designed as an orientation course and afforded the University an opportunity to study the efficacy of such a procedure.

The following is a description of the course:

SPECIAL SHORT TERM FOR MEN February 23 to March 13, 1943

A special short term for men has been arranged particularly for those who wish to qualify for enlistment in the Navy V-1 Reserve before March 15, 1943. Men who have planned to enter for the spring quarter on March 29 may also enroll for this short term.

Entrance requirements are the same as for any other term. Registration will be at

9 A.M. on February 23, and the required aptitude test at 1 P.M. on the same date. Classes will begin on February 24 and will be held daily except Sundays. A course in orientation will be offered for the satisfactory completion of which four quarter units of credit will be given. Dormitory accommodations will be provided. A proportionate rate for tuition and other charges will be made.

The course in orientation will include instruction in English composition and mathematics, and will serve as a placement course for the spring quarter in those subjects. Instruction will also be given in physical education and military hygiene and in the use of the University facilities. It will prepare for successful university work, develop good study and health habits, and furnish a basis for choosing a suitable curriculum for the future.

Instruction will be given by members of the faculties of the Schools of Health and Humanities, and the Departments of English and Mathematics, and will be under the general direction of John W. Bunn, Dean of Men.

At the completion of this course, the following report was submitted to Dr. Wilbur.

March 23, 1943

DEAR DR. WILBUR:

It occurs to me that you might be interested in a report on the University Orientation Course which you created at the end of the winter quarter in order that students who were planning to come to Stanford might fulfill certain Navy requirements, if they were interested in enlisting in the Navy, before March 15.

The course as you know was conducted from February 23 to March 13. In all, 42 boys registered for it. They began work in the morning at eight o'clock and continued through till five each day except Saturday and Sunday, with only one hour, from ten to eleven each morning, of free time. Evening assignments were worked out so that they were well occupied throughout most of their waking hours.

They were given the idea that college is a place to work, and it was refreshing to observe their favorable reaction to this idea. I took occasion to get the reaction of the students to the course as we approached March 13. I also asked for reactions from the instructors in English, mathematics, humanities, hygiene, and physical education, with respect to the value of this orientation course and their observations of the students' attitude toward it. In general the students were very enthusiastic and they were appreciative of the attention which was given them and of the opportunity to learn to work on a university level before they start on our regular course of study.

As the course progressed, the students who had not graduated from high school and who were admitted to Stanford at the beginning of the winter quarter learned about the orientation course and many of them expressed regret that they did not have an opportunity to go through this same procedure.

Every one of the instructors who conducted classes felt that his time was well spent. The English classes were conducted on an individual basis. The students were divided into groups, no one of which exceeded eight in number. The work was carried out on a laboratory basis. As a result of the close supervision of the students, all but thirteen were recommended to take English 2A without taking the matriculation examination. The thirteen will be required to take the English matriculation examination or to register in the review course in English. The mathematics class was conducted in a similar manner.

Since we will have as beginning students for the duration boys who are much younger than our average freshmen, it may be wise for you to consider seriously the wisdom of repeating this orientation program in its present form or with some revised features. Personally I was very enthusiastic about the outcome and was very much pleased with the caliber of the boys who came for the course.

Cordially yours,
JOHN W. BUNN,
Dean of Men

Thirty-eight of these students registered for the spring quarter, and all but five made at least a "C" average. Twelve made a "B" average or better.

SCHOLARSHIP

The trend of scholarship of the new Lower Division students was interesting in view of the great amount of confusion incident to the many adjustments necessary because of the war. In spite of the common feeling that the war was such a strong emotional factor that boys could not possibly settle down to serious school work, the total picture to some extent contradicts this opinion.

The tabulation of the number of new Lower Division students attaining a "B" average for at least one quarter during the year shows that the best record of the Encina men was made during 1942-43. It is true that the number of new Lower Division students was greatest during this past year, but nevertheless the showing is very encouraging. The indications are that on the whole our students realize the seriousness of the times and are meeting the challenge creditably.

ENCINA "B OR BETTER" AVERAGES

	1939-40	1940-41	1941-42	1942-43
Autumn	97	84	115	72
Winter	45	32	21	50
Spring	29	34	28	29
Summer	..	..	..	22
	171	150	164	173

On the other hand, the record of the number of Encina men who were on probation or disqualified did not compare favorably with the past three years. The number of probation cases was twice that of the autumn quarter of 1941.

These figures reflect two extremes in attitude and effort; on the one hand are those students who were stimulated by the war pressure to redouble their efforts, and on the other was a group which was not able to get down to work and thus became "war casualties." Comparative figures for the autumn quarter for the past four years are given below:

Autumn Quarter	1939-40	1940-41	1941-42	1942-43
Probation	56	65	51	103
Disqualification	7	3	7	5

A change in the engineering curriculum due to the war, whereby physics was moved into the first-year schedule, created some scholarship problems. Those students who registered for chemistry, physics, and mathematics, plus one other course, found their load was too heavy. So many students called at the office to discuss their difficulties in this connection that a study was made of the problem. The following letter to Dean Morris was a result of this study.

February 1, 1943

DEAR DEAN MORRIS:

Pursuant to our recent conversation concerning the engineering program for new Lower Division students, I have had a tabulation made of the scholarship results of those who were registered for chemistry, physics, and mathematics during the autumn quarter.

There were 58 such students. Of these, 27 went minus. Of the 27, 22 went on probation. The percentage of these students who incurred probationary status is considerably higher than for the total of the new Lower Division class.

I also note, in studying the aptitude scores of the students enrolled in these three courses, that half of those who went on probation have scores in the third group; whereas of those who made at least a "C" average, only eight fall within the third aptitude group. This may or may not be significant.

It was interesting to note that all of the students who took *only* these three courses made satisfactory scholastic averages. All of those who went minus took more than the three named courses. This may be an argument for limiting the registration of our first quarter students in engineering to the three fundamental engineering courses.

I have attempted to make further analyses of this group, and I find several students who were not at all interested in engineering or who were having difficulty adjusting themselves to any sort of university environment. Further, five of those on probation were out for freshman football and all of these five have rather low aptitude scores. In contrast, there were five others out for football who made good scholastically, and each of these boys has an aptitude score in the second group.

These comments may have some value in further consideration of this problem with respect to our engineering students. I thought you would be interested in having this survey.

Cordially yours,
JOHN W. BUNN,
Dean of Men

FRATERNITIES

It became evident at the beginning of the spring quarter that few if any of our fraternities would have sufficient personnel to continue to operate after the end of the quarter. Fewer Encina men (233) were pledged than in past years and membership was being drastically reduced by calls to active duty. A survey indicated that less than one hundred fraternity men would register for the summer quarter and membership was problematical thereafter for the duration.

As a consequence the following letter, which was sent to all the fraternities, was adopted as the policy of the Interfraternity Board. All organizations closed their houses at the end of the spring quarter.

April 2, 1943

To the President

----- Fraternity

Although the status of our fraternities for the duration is still unsettled, it is certain that some definite plans should be made now. Already many of our fraternity leaders have left the University. Our Interfraternity Council president and secretary, just recently elected, have been called for military training. Before our ranks are entirely depleted, those who are experienced in the operation of the fraternities should make arrangements for any eventualities. The recent meeting of the National Interfraternity Conference made several practical suggestions which should be studied by all fraternities.

Here at Stanford we need to consider several points.

1. Two survey blanks were sent to you before the end of the winter quarter. These should be filled out and returned immediately. Since our interfraternity officers are no longer here, I suggest that these blanks be sent to the Dean of Men's Office.

2. It is apparent that some fraternities may not be able to operate independently during the present quarter. These fraternities may desire to join in some fashion. By the terms of your lease, you must have the written permission of the University to operate on any other basis than that of a single, independent organization. If you consider merging with some other fraternity, you should apply to Dr. Wilbur for this permission before you start operations.

3. There is grave doubt that any of our fraternities will be able to operate after the spring quarter. In anticipation of the necessity of closing, several steps should be taken immediately:

a) Your house should be prepared so that it can be locked securely. Locks on windows and doors should be checked. If your property should remain vacant for some time,

you will want to make sure that everything inside will be safe. Unless you look after these details now, you cannot expect the Police Department to give adequate protection.

b) If your property is needed to accommodate some phase of the Army Specialized Program, you should make plans for storing your furniture, pictures, trophies, game equipment, fraternity records, etc. It would not be wise to leave this equipment in your house. The chances of loss are too great.

4. You should set up some kind of a trusteeship to be responsible for your fraternity affairs in the absence of the active chapter. Alumni, University officials, business men may be asked to assume this function. Some of you have made these arrangements. All others should do so immediately.

I sincerely hope that there will be no delay in carrying out these suggestions and any others that may seem wise in light of future developments. Don't wait until there are no experienced active members left or until the chapter is in bad financial condition before starting to act. Leave your organization in good shape and in dependable hands. Plans for reopening will then be carried out more readily.

If the Dean of Men's Office can be helpful in this job, please do not hesitate to come to us.

Cordially yours,

JOHN W. BUNN,
Dean of Men

The demand for housing facilities because of the large number of soldiers enrolled in the AST program made it possible for the University to enter into an agreement with the fraternities to lease their properties for dormitories for the duration. Fourteen houses were occupied during the summer and it is expected that all will be used at the beginning of the autumn quarter 1943. The fact that this plan could be carried out was an extremely fortunate development for the fraternities and is the best possible insurance against bankruptcy during their period of inactivity.

At the last meeting of the Interfraternity Council, the powers of the Council were delegated to the Interfraternity Board. Thus the Board became the sole executive body to represent the fraternities until after the war.

The Board held two meetings during the summer quarter to determine policies for the next academic year. The summer registration of fraternity men showed that fourteen fraternities had six or less members in attendance, while ten had seven or more. Only one fraternity had more than ten.

It was decided to poll student opinion on fraternity policy. The significant points of this poll, which was in questionnaire form, follow.

1. The majority of new Lower Division students are definitely interested in fraternities.
2. A significant majority prefer to wait until after the war to join.
3. There has been no great amount of illegal rushing during the summer.
4. There seems to be a strong desire to have full information about all fraternities before any decision is made.
5. There is an indication that whenever rushing is held it should be organized and include all.
6. Members and prospective members are not in accord with the National Interfraternity Council policy of having alumni carry on rushing activities.
7. There is a slight majority in favor of pledging a fraternity when only a limited membership is present on the campus.
8. The majority favors a short rushing period.

The following program was adopted for the autumn quarter with respect to rushing, pledging, and initiating:

1. First quarter new Lower Division men are not eligible for rushing.
2. No student on probation may be allowed to pledge.
3. There shall be no rushing in the new Lower Division halls.
4. Rushing may be carried on among eligible rushees at any time by those fraternities which desire to rush.
5. The number of pledges per fraternity shall be limited to seven eligible men per quarter.
6. No pledge is considered official until the pledge and a representative of the fraternity to which he is pledging meet with the president of the Interfraternity Board for the purpose of filing an official record of the pledging.

STUDENT GOVERNMENT

In order to assure continuity of student government, the students made provisions to set aside the A.S.S.U. Constitution where necessary to meet any emergencies that might arise in student government as a result of war conditions.

The first major change was to make women students eligible for the office of president of the Associated Students. In the special election which was held late in the spring quarter, after Jack Reynolds, the duly elected president, was called to active duty, Janet McClanahan was chosen the first woman president.

They also adopted plans to include the soldier students as representatives on the Executive Committee in order that they might be given recognition as regular members of the student body. A plan of including the soldiers in the financing of student government, since they do not pay student fees and since the government has not included this item in its contract with the University, is now under consideration.

The turnover in the personnel of the Men's Council has been considerable because many members have been called to active duty before the expiration of their term of office. The continuity of this body, as provided for by the A.S.S.U. Constitution, has been broken so that, through lack of experienced representatives, its usual effective work has been somewhat reduced. The record of Council cases for the year appears below. Traffic cases are materially reduced because students were not operating automobiles as in normal times. Many brought their cars to the campus at the beginning of the year but parked them for most of the time thereafter. Bicycles were much in evidence as the common means of student transportation.

CASES CONSIDERED BY MEN'S COUNCIL, 1942-43

Charge	No. of Cases	Penalty
Violating Honor Code	6	1 failed in course
		2 failed in course and assessed 30 hours work
		1 found not guilty
		1 failed in course, with immediate cancellation of registration in case of any future violation
		1 failed in course, and denied permission to register again in the University

Charge	No. of Cases	Penalty
Shouting profanity at Encina	1	1 warning
Breaking into service station and attempting to take pay telephone	1 (involving 2 men)	1 registration canceled, with permission to apply for reinstatement after one quarter
		1 registration canceled, with immediate reinstatement and 25 hours work
Taking chair from dormitory and refusing to return it	1	1 required to return chair and do 10 hours work
Illegal electioneering	1 (involving 30 men)	30 fined \$2 and 2 hours work each
Causing disturbance in dormitory	1 (involving 25 men)	25 required to do total of 20 hours work
	1 (involving 9 men)	9 required to do total of 15 hours work
Conduct unbecoming a Stanford gentleman	2	1 required to do 10 hours work, with immediate cancellation of registration if ever again brought before Council
		1 required to do 5 hours work
Possession of alcoholic beverages on campus	1	1 required to do 5 hours work
Total of 15 cases involving 77 men		

TRAFFIC CASES, 1942-43

Charge	No. of Cases	Penalty
Speeding	48	Fined \$139.50
Parking	64	Fined \$83.50
Failure to make arterial stop.....	5	Fined \$11.00
Carrying passengers on running board..	2	Fined \$3.00
Reckless driving	8	Fined \$35.50; 5 given 2 hours work, 1 driver's license suspended until end of quarter
Driving with poor lights.....	5	Warned to have them put in order
Driving with no tail light.....	1	Warned
Cutting corners	1	Fined \$2.50
Driving with defective muffler.....	1	Warned to have repaired within week
Driving wrong way on one-way street..	1	Fined \$1.00
Driving with lights out.....	2	Fined \$2.00
Speeding, second offense.....	1	Fined \$2.50 and 15 hours work
Total of 139 cases; total fines \$280.50		

During the summer quarter the Associated Students gave a reception in honor of Dr. and Mrs. Wilbur. On that occasion a scholarship was established in Dr. Wilbur's name. The scholarship is open for contributions and it is the plan of the Associated Students to add to it each year.

STUDENT LOANS AND TUITION NOTES

Below is a record of the loans and tuition notes issued by this office during the year. The demand for short-term cash loans was heavy, but the number

ADMINISTRATIVE REPORTS

of tuition notes was greatly reduced. Stanford participated in the Government War Loans which were made available to students in engineering, chemistry, physics, and medicine. A record of these is shown as a separate tabulation. These loans were particularly attractive to some students because provision was made for subsistence money in addition to tuition. The number of reports required and the amount of accounting involved created a considerable burden to both the Accounting and the Dean of Men's Offices.

LOANS ISSUED 1942-43

	No.	Amount	Amount Collected
William Burton Barber Loan Fund.....	17	\$1,237.00	\$2,341.50
Horace Davis Loan Fund.....	41	1,847.80	3,934.08
Dean of Men's Loan Fund.....	22	1,187.00	1,964.06
Memorial Loan Fund.....	16	1,410.10	483.00
	96	\$5,681.90	\$8,722.64

GOVERNMENT WAR LOANS

Field	No.	Amount
Physics	1	\$ 382.00
Chemistry	2	803.00
Engineering	22	6,706.25
Medicine	37	9,532.00
	62	\$17,423.25

TUITION NOTES ISSUED 1942-43

	Autumn	Winter	Spring	Summer
New notes	15	15	9	5
Renewals	15	12	10	5
Totals	30	27	19	10
Notes taken out by fraternity men.....	11	10	8	4
Notes taken out by non-fraternity men..	19	17	11	6
Totals	30	27	19	10
Notes taken out by first-year men.....	5	3	6	1
Notes taken out by second-year men....	8	2	2	1
Notes taken out by third-year men.....	15	12	5	2
Notes taken out by fourth-year men....	2	10	6	6
Totals	30	27	19	10
Notes taken out by graduates.....	2	3	4	2

PERSONAL

Assistant Dean Sharp is spending practically 100 per cent of his time on housing and messing problems incident to the Army Specialized Training

Program. As a consequence it has been necessary to relieve him of most of his responsibilities in the Dean of Men's Office for the duration.

Dean Bunn attended the annual Conference of the National Association of Deans and Advisers of Men at Columbus, Ohio, in April. He was appointed to the executive committee of that organization for the year 1943-44.

JOHN W. BUNN, *Dean of Men*

DEAN OF WOMEN

In the Dean of Women's report for 1941-42 she spoke of the attempts of the students to adjust to the changes which the war made in their personal lives and in the group interests on the campus. By the autumn of 1942 there developed a number of student leaders who were convinced that the old patterns characteristic of college life before Pearl Harbor no longer fitted necessarily the new conditions, and who were determined to act on this conviction. The educational program which they undertook to help the students as a whole understand the new situation, and their efforts to refashion the practices and attitudes of student government, where necessary, were sensible, realistic, and mature.

Feeling keenly that the principles of student government were worth maintaining during the war period, they modified the constitution to insure greater simplicity and flexibility of the machinery. The membership of Executive Committee was reduced in size while its representative character was maintained, and the main offices were thrown open to the best qualified person, man or woman. The dates of elections were arranged so that no officer would hold office more than three quarters in the four-quarter year and so that these officers were staggered to insure if possible some continuity in the rapidly changing student official group. The arrangements by which the soldiers also had representation on the Executive Committee tended to lessen the difficulties inherent in having students on our campus under two principles of control: the student government of the civilian student with a great amount of freedom for the individual, and the regime imposed by the Army regulations. There was also a sincere effort to simplify the social program, but nostalgia for college life as the entering student had pictured it is hard to cure. All our problems, or rather our confusions, are not yet behind us, but the road ahead has cleared and if the students can keep the compass steady and not go back to old trails because they have been associated with campus life in the past, we will make genuine progress toward a more constructive student government than we have had in the past.

One definite gain even can be claimed: the crisis of the times has developed an unusually large number of real leaders among the students and also many intelligent and self-directing followers. In the elections for the spring quarter the vice-president of the Associated Students, Miss Janet McClanahan, was elected president, the first woman in the history of the University to hold that position. Her tact, maturity of judgment, and ability to work generously and co-operatively with all elements in the campus community

made the two quarters of her term of office which this report covers ones of outstanding achievement.

One illustration of the way old practices and values were re-examined was the protest sent to Panhellenic by the women sponsors, both sorority members and independent women, calling attention to the disadvantages of sororities, particularly as they affected the new women, the sponsors' special concern, and asking whether there were compensating advantages for all Stanford women growing out of the system. Such a protest had been heard many times in the past,* but the quality of leadership and the seriousness of the disadvantages at this critical time made the protest important and meaningful. In a joint meeting of Panhellenic and the sponsors the active members of Panhellenic met the sponsors' criticisms with dignity and balance, and a joint committee was formed to see if common constructive conclusions could be reached. Before much headway toward an intelligent settlement could be made, however, it was decided the joint meetings were futile because the national officers of the sororities and the pro-sorority alumnae felt active Panhellenic had no right to make a definitive decision since their interests also were involved. Both groups, therefore—Panhellenic assisted by alumnae and national officers—formulated their respective opinions and suggestions for advantageous changes and submitted them to the Board of Trustees. The Board appointed a subcommittee to study the question from all angles and make a report with recommendations to the Board as to whether sororities should be discontinued at Stanford or whether modification of present practices could meet the difficulties. This committee with Mr. George Ditz as chairman gave most fairly and generously an opportunity, first, for the students to be heard and then for the alumnae. At the end of the summer the subcommittee had not been able to complete its study so the autumn quarter will open with no decision announced as to future plans or policies.

The academic work of the women this year was approximately the same as it was last year. I again report with regret that the spring quarter record was less satisfactory than the autumn quarter and winter quarter records. The "tradition" of not doing your best academic work in the spring needs to be dramatically uprooted. While the average of the men as a whole was not as good as the average of the women, the men showed improvement in the spring quarter in spite of the strains of the times, which for them, as a whole, were more upsetting than for the women.

One cause for many women not doing the academic work of which they were capable was their failure to see clearly what their college education was contributing to their individual development and to their future as active participants in the war effort or as citizens equipped economically for the postwar days. To help the women at this point we provided as thorough and dynamic vocational information and advice as possible. In the autumn we asked Miss Doyle, our Vocational Adviser for Women, to go to Evanston, Illinois, to a two-day conference held at Northwestern University on "College

* A detailed statement, covering the last twenty-five years, of the tensions caused by sororities on the campus and in our public relations and of the various efforts made to relieve them, when crises similar to the one which arose last winter came up, was sent to the Chancellor by the Dean of Women.

Women and the War." On her return she brought to the women a clear statement of the consensus of opinion as to what college women could contribute at this time to the war effort and some information as to what would be the most valuable training for them to get for future use. We had a mass meeting of the women to give them this information, and out of that grew two policies which have directed the vocational advising given since—first, that the students should continue if possible their work toward their liberal arts degree in whatever school or department they found most interesting and stimulating; second, that they should use their free elective time to get at least one series of organized courses leading to possible effectiveness in the war effort should women be drafted or should any individual wish to stop before the end of her undergraduate work. A committee of the faculty under the chairmanship of Dean Jackson was appointed to see what short series of courses focused on the war our facilities would make possible for the women and to organize them so that the students could see clearly what they were. The result of the committee's work was a pamphlet, *Wartime Program for Stanford Women*, and this pamphlet has been used extensively in conferences with the women and has been sent to many other colleges. It was also sent to the parents of all the women. Chancellor Wilbur as chairman of the Educational Division of the Ninth Service Command Commission on College and University War Problems called together a committee of women from the educational institutions in this area to consider the educational needs of women both during the war and afterward. Under the able chairmanship of Mrs. Virginia Judy Esterly, assistant to the president, Scripps College, a realistic discussion of these needs and the ways to meet them took place and was of much help both to the delegates working together and to the Stanford faculty committee in planning the war courses. The addition to our curriculum of majors in nutrition and dietetics, in child care and nursery school, in primary education and in pre-social service undoubtedly will result in more purposeful planning of the academic programs when the new offerings are fully known to the students. There was increased interest in the pre-nursing program for women and in the physiotherapy training. The work of Miss Doyle as Vocational Adviser for Women was greatly assisted by a student vocational committee which endeavored to find out the vocational questions which were most common among the women and to arrange vocational programs which would help to answer these questions.

It was reported last year that the personal as well as the group problems increased among the students and this trend was also marked this year. More of the time and experience of the staff was called on by individuals than ever before. We have learned much from them and we hope that we have been able to be of some assistance to them. For the group as a whole one problem, the economic, appeared less serious than in past years. As shown in the following table, there was a decrease of forty-six applications for tuition notes by undergraduate women, and of the fifty-five notes which were applied for this year only forty-two students found it necessary on registration day to take out the notes. The same tendency, though not as markedly shown, was true of the graduate group.

ADMINISTRATIVE REPORTS

TUITION NOTES

	Applications Made	Notes Issued
Tuition notes issued, 1941-42		
Undergraduate		
Autumn quarter	29	18
Winter quarter	30	23
Spring quarter	34	29
Summer quarter	8	4
Graduate		
Autumn quarter	5	4
Winter quarter	7	5
Spring quarter	7	5
Summer quarter	4	3
Tuition notes issued, 1942-43		
Undergraduate		
Autumn quarter	17	11
Winter quarter	10	9
Spring quarter	21	18
Summer quarter	7	4
Graduate		
Autumn quarter	5	2
Winter quarter	2	2
Spring quarter	4	3
Summer quarter	1	1

Not only was there less need to borrow the tuition, but there was less call for emergency loans. In 1941-42 there were 17 notes issued, totaling \$1,211.50; in 1942-43, 12 notes were issued totaling \$757.50. There was, however, a greater need for scholarship aid than we could supply. Twenty-five women were given student-aid grants in 1942-43 and 73 women received scholarships. We could, however, have used to definite advantage more scholarship funds. A number of the women who will not return next year—some of them very excellent students—we lost to other institutions, and a number of the most promising students scheduled for admission did not come because we did not have enough scholarships to care for them. Even our generous loan policy did not help many on account of their reluctance to borrow in these uncertain times.

All of our living groups, both halls and sororities, were filled in the autumn quarter, and our registration of undergraduate women showed little change in the succeeding winter and spring quarters. In the summer quarter we had a larger group of women students than we have had before in that quarter. Roble Hall was almost filled with new women, Lagunita Court was filled with independent and sorority women, and several of the smaller houses were used for graduate students. An acceleration of the individual's program in order to complete the requirements for the degree and get into some active work as soon as possible was the main reason, I believe, for this marked increase in numbers. An unusually large number of new women, too, wished to begin their college course in the summer quarter. In the last year's report deep appreciation was expressed for Mrs. Cubberley's generous gift of her home to be used as a house for graduate women. Our anticipation of its usefulness was more than realized this year. Ten women lived in the

house with Mrs. Cubberley and two women came in for dinner. The house was run on a co-operative plan. The personal interest which Mrs. Cubberley took in each of "her girls" and in all of the group activities made the house a real home, not only for those fortunate enough to live there, but also for the graduate group as a whole for whom it was the social headquarters.

Miss Anastasia Doyle was Acting Dean in the Summer Quarter and combined the work of the office with preparations for housing the large group which we expected in the autumn. With the assistance of two full-time assistant directors we were able to have continuity of policy in the halls and at the same time give our regular staff their vacations. The absence of adequate household help made serious housekeeping problems, but we used the opportunity to try out some experiments with student help and learned much from those experiences which I am sure will be useful to us next year, as the housekeeping side of our problem shows no signs of being lighter.

The Dean of Women has been most fortunate, as always, in having a staff of assistants who are genuinely co-workers and whose loyalty, intelligent co-operation, and fine spirit can always be counted on. The residence staff was unchanged last year; the office staff lost Miss Margery Ann Bowen to the Red Cross in April but was fortunate to get in July a Stanford alumna of the class of 1942, Miss Irma Jean Hannibal.

The Dean of Women and members of her staff have worked on many committees, both on the campus and off, looking toward effective activity for the war and for postwar service to women. A number of talks have been given to alumni and school groups and to the Stanford and Los Angeles Mothers' Clubs.

MARY YOST
Dean of Women

MEMORIAL CHURCH

The work of the Memorial Church for the academic year has been a continuation of its ordinary peacetime activities with many new activities incidental to the war and the presence of soldier students on the campus. The work may be divided into six classifications as follows:

Public worship.—The most important of all activities connected with the Memorial Church is the conduct of public worship, designed to unify and express the spiritual life of the entire campus. This has been done by presenting a variety of services and a variety of speakers representing the main types of thought in our country. Among the invited speakers have been representatives of different Protestant denominations and two Jewish rabbis. The two Jewish rabbis conducted a synagogue service using the ancient prayers and songs of their people.

A great effort has been made to include as many students and faculty as possible as participants in the service. This has been done by asking for volunteers for prayers, Bible readings, and ushering. Ordinarily at least two students sit in the chancel each Sunday and share in the service, while four act as volunteer ushers. Ushers for the different Sundays represent different living groups. In the course of the year about two hundred and fifty students

and faculty members have thus participated. On one Sunday, in place of the sermon, two students gave brief addresses.

The visiting speakers for the year were as follows :

Autumn Quarter

Thomas E. Oliver, Presbyterian Church, Ojai
Leon L. Loofbourow, Methodist Church, Richmond
Frederic Spiegelberg, Lecturer in Religion, Stanford

Winter Quarter

Harold A. Bosley, Mount Vernon Place Church, Baltimore, Maryland
Theodore C. Hume, Claremont Church, Claremont

Spring Quarter

Irving F. Reichert, Temple Emanu-El, San Francisco
Hoyt Hopewell Hudson, Professor of English, Stanford

Summer Quarter

Obert C. Tanner, Instructor in Religion, Stanford
Earl D. Weed, Chaplain, Western Defense Command and Fourth Army,
San Francisco
Thomas E. Oliver, Presbyterian Church, Ojai

During the autumn quarter, while the Chaplain of the University was absent, speaking at various universities in the East, Thomas E. Oliver of Ojai served as Acting Chaplain and spoke on the majority of Sundays. The Chaplain of the University has spoken on a majority of the Sundays during winter, spring, and summer quarters, ending the academic year with a series of four addresses on "The Predicament of Modern Man." These addresses are to appear soon in a book. The last one of these was printed in advance and given to all worshipers at the close of the service at which it was delivered. The attendance at these and other services has been unusually large. Two communion services have been held, one at the end of the autumn quarter with Thomas E. Oliver and one as an early morning service in the spring quarter with Albert Olson in charge.

At the matriculation service in the autumn, there were brief addresses by the Chancellor, the Dean of Women, and the Dean of Men. Almost all members of the incoming class attended. At the Baccalaureate service in June, the address was given by the Chaplain, assisted by Major Alwyn E. Butcher of the Presidio of San Francisco.

Student counseling.—The advisory group of students acting as helpers of the Chaplain has been exceptionally strong during the year, meeting every Tuesday night from nine until ten o'clock and usually with about twenty present. During the spring and summer quarters monthly meetings were held with representatives of all living groups in order to acquaint students with the entire religious program. The amount of student counseling has been greatly increased by the introduction of the soldier students, most of whom look upon the Memorial Church as their natural place of worship and its staff as those to whom they can look for help of various kinds. Student soldiers

were introduced in the spring quarter into the student cabinet and many attended faithfully.

Special services.—An increasing number of Stanford people continue to turn to the Memorial Church for help in the celebration of the great times in their lives, whether of joy or of sadness. During the academic year, there were one hundred marriages performed in the Memorial Church, twenty christenings, and several memorial services. Special student groups were given permission to conduct services of worship for their own members.

Academic courses.—The usual academic courses have been given with three persons teaching, as follows: Frederic Spiegelberg, Obert C. Tanner, and the Chaplain, though somewhat fewer students enrolled than in former years. A class for campus children was conducted by the Chaplain in the winter quarter, dealing chiefly with the great passages of the Bible. This was attended by an average of forty children between the ages of nine and thirteen.

A new course for faculty wives, who find in the Memorial Church their chief spiritual home, has been inaugurated, meeting once a month at the home of the Chaplain and conducted by the Chaplain's wife with various lecturers invited to do the teaching.

New war work.—The presence of the soldier students on the campus has necessitated a great many new efforts. The chief task which has devolved on the staff of the Memorial Church is that of helping with housing, especially the housing of the wives of the soldiers. The Chaplain has become the chairman of the local housing committee of the community and the public has responded most encouragingly to the call for help in opening their own homes.

Church preferences.—The following tables exhibit the church memberships or preferences of students entering the University in 1942-43.

MEN

Preference	Autumn	Winter	Spring	Summer
Baptist	9	1	1	6
Catholic	54	17	11	34
Christian	17	3	1	3
Christian Science	27	10	1	5
Congregational	25	11	2	18
Episcopal	73	27	7	37
Friends	3	1	..	1
Hebrew	22	8	1	6
Latter Day Saints	11	1	..	6
Lutheran	13	4	..	3
Methodist	40	9	11	21
Presbyterian	72	41	10	34
Protestant	42	4	5	18
Unitarian	2	2	..	..
Miscellaneous	13	2	4	5
	423	141	54	197
No preference	62	18	12	..
	485	159	66	197

WOMEN

Preference	Autumn	Winter	Spring	Summer
Baptist	10	1	4	8
Catholic	37	2	6	40
Christian	6	2	2	7
Christian Science	27	8	3	12
Congregational	32	6	1	18
Episcopal	93	11	7	48
Friends	1	..	..	1
Hebrew	6	5	3	3
Latter Day Saints	1	..	1	3
Lutheran	5	3	2	5
Methodist	19	5	5	27
Presbyterian	59	16	7	41
Protestant	12	7	1	13
Unitarian	4	..	..	..
Miscellaneous	2	2	1	5
	314	68	43	231
No preference	23	5	5	9
	337	73	48	240

D. ELTON TRUEBLOOD, *Chaplain*

MUSEUM OF FINE ARTS
AND THOMAS WELTON STANFORD ART GALLERY

The total number of visitors during the year was 4,871. Those admitted free numbered 2,695, and 2,376 paid an admission fee of 25 cents each, amounting to \$594.00.

A greater number of free admissions has been allowed during the preceding year, which includes free admittance during three days of Commencement Week and also to those in the service wearing uniforms. This condition has not caused any diminution of pay visitors, who have also increased in number.

The Art Gallery held exhibitions as follows:

Paintings from the Stanford University collections.
Oil paintings and water colors by Jonathan Scott.
Hawaiian flowers painted in pastels by Ranaud Hoffman.
Oil paintings by Otto H. Schneider.
Water colors of Shakespeare's flowers by Winifred Walker.
Block prints of birds by Wm. S. Rice.
Paintings by artists of Pasadena, California.
Paintings by artists of Carmel-by-the-Sea, California.
Etchings and prints by the California Society of Etchers.
Photographs by Charles W. Dole.
Photographs by George J. Seidneck.

PEDRO DE LEMOS, *Director*

REGISTRAR

The impact of war conditions upon the University became more and more evident during the year 1942-43, and the effects are reflected throughout this report. During the autumn of 1942 the age for induction under the Selective Service Act was reduced to eighteen, with an immediate effect upon enrollment and applications for admission. The situation was met in part by arranging to admit men at the end of the third year of the normal high-school course.

The action taken by the Academic Council was as follows:

"That during the war emergency well-qualified applicants for admission be accepted without requiring high school graduation, and with four less high school units than are now required; that the Committee on Admission and Advanced Standing be given discretion in the adjustment of entrance requirements in individual cases involving enlistment in the armed services."

The result of this action was surprising. Some hundred men were admitted under its terms, and they were placed in the same classes as the regular freshmen. They carried the same amount of work and did not receive any special consideration. At the end of a year their records were reviewed, and it was found that they were as good as those of any group of regular freshmen who had completed four years of high school instead of three. When such students were selected on the basis of good records and the recommendation of their school principals, they proved able to carry the normal work of the first year successfully.

In the spring of 1943 arrangements were completed for the establishment of a unit of the Army Student Training Program. The first trainees arrived in May—out of step with the regular University calendar. It was then arranged to have the Army unit follow their Cycle I, the terms of which start on the second Mondays in July, October, January, and April, and continue for twelve weeks. The University calendar was shifted slightly, the quarters lengthened a few days, and an orderly and convenient arrangement was secured. The group that started in May were carried through the period of their training on their own calendar with some temporary inconvenience.

The curricula arranged at the outset were Advanced Engineering, European Area and Language, Far Eastern Area and Language, and Personnel-Psychology. The first terms of the Basic and the Pre-medical curricula were added in July. A unit of the Civil Affairs Training School under the Provost-Marshall's office was also established in May. In addition to this, a unit of the Student Training Assignment and Reclassification service (known as the STAR) was established in April. As the name implies, this unit was organized for classification rather than instruction purposes. Its members were on the campus for periods of five days to five weeks, and the men were not considered to be students in the University. They were given some instruction of a review type. This unit was transferred from the University at the end of the summer quarter.

The following data apply to the civilian enrollment only, and do not include the Army students except as indicated in some of the tables.

The civilian enrollment was 4,660, a decrease of 426 from registration for the year 1941-42. The largest number enrolled for any one quarter was 3,650 during the autumn.

The number of new civilian students admitted was 1,673, a decrease of 207 from the previous year. The details are given in Table IV, and show that the decrease was spread over all divisions, particularly the Graduate and Upper divisions.

The total enrollment as compared with the previous year shows a decrease of 384 in the Graduate Division and 277 in the Upper Division, and an increase of 233 in the Lower Division. The total number of women students was 1,853, for the previous year 1,768.

The number of degrees granted was 1,012, a decrease of 144 from the year before; divided, 135 fewer to men and 9 fewer to women. The total number of Bachelor's degrees decreased 63; Master of Arts degrees, 12; Doctor of Philosophy degrees, 11; all other degrees, 58.

The table "Survival of Entering Freshmen" reflects the withdrawals for active war service after the first year. The figures given at the bottom of the table are the lowest since 1921.

SURVIVAL OF ENTERING FRESHMEN

Entered	Number	Percentage Surviving			
		After One Year	After Two Years	After Three Years	After Four Years
1921-22	514	66.5	55.3	54.3	52.9
1922-23	442	71.7	63.6	60.7	56.3
1923-24	489	77.9	66.6	62.5	58.5
1924-25	531	79.1	70.2	64.2	66.0
1925-26	547	83.0	73.1	71.7	70.0
1926-27	468	78.2	73.0	66.8	65.0
1927-28	512	84.0	78.5	77.9	72.3
1928-29	431	81.2	76.8	72.2	68.7
1929-30	388	87.6	77.3	72.4	70.6
1930-31	415	83.6	69.2	68.7	54.0
1931-32	417	77.2	70.3	54.0	55.6
1932-33	445	79.3	62.2	54.8	68.1
1933-34	553	75.9	56.0	68.0	66.4
1934-35	638	72.7	72.3	67.4	66.1
1935-36	597	81.2	69.7	62.8	63.8
1936-37	663	80.1	70.6	68.0	66.5
1937-38	634	82.3	69.7	68.8	67.4
1938-39	604	81.8	72.7	65.1	59.8
1939-40	598	82.9	71.8	73.9	53.5
1940-41	628	85.2	66.7	41.3	....
1941-42	659	79.8	34.4	....	....
1942-43	475	76.0	....	....	....

The sections of this report dealing with the Appointment and Student Employment Services show the effect of war conditions. There were fewer applicants for positions or employment, and more demand for services than at any time in recent years. Substantial aid to students was provided through the National Youth Administration, but most of it could not be used.

The routine of the office was changed in every department to meet new conditions and requirements. The Army students required changes in record keeping, and the problems of schedules and room assignments became complicated. Fortunately, the officers in charge of the Army units were co-opera-

on the whole, the various new demands were met by the office staff much difficulty.

College Aptitude Test.—As a part of the regular program of helping in-candidates to meet entrance requirements the College Aptitude Test is offered in thirty-seven centers in California, Oregon, and Washington. While scores on the College Entrance Examination Board Scholastic Test were accepted for applicants located in other states. As for the years the Iowa Silent Reading Test and the Ohio State University Psychological Examination were used in the Western centers. The following are the numbers of candidates taking the test at each center where

Alameda	3	Pasadena	67	Stockton	4
Albany	4	Pomona	17	Ukiah	3
Alhambra	3	Red Bluff	0	Ventura	9
Altamont	1	Riverside	22	Visalia	6
Amesbury	18	Sacramento	30	<i>Oregon</i>	
Anaheim	17	Salinas	6	Eugene	4
Archery	45	San Diego	29	Portland	31
Arroyo	154	San Francisco	155	<i>Washington</i>	
Atascadero	1	San Jose	10	Seattle	49
Auburn	9	San Luis Obispo	2	Spokane	3
Avalon	5	Santa Barbara	13	Tacoma	24
Avenal	6	Santa Cruz	6	Walla Walla	8
Bakersfield	70	Santa Rosa	7	Total	1,717
		Stanford	876		

A total of 1,717 tests constitutes a 6.5 per cent increase over the corresponding figure for 1942. Notable is an increase from 45 to 84 candidates at the Washington centers. For the 37 centers, 14 showed an increase, 20 a decrease, and 3 no change in the number of tests taken. No changes were made in the locations of the test centers.

A supplemental test service was given to Mills College and to the Menlo Park and Junior College, principally in the scoring of tests administered at those schools.

Four-year scholarship records at Stanford for the new students for the year have been compared by the correlation method with scholarship records for the immediately previous school and with scores on the College Aptitude Test. For Lower Division students there is noted higher correspondence than for the Upper Division. For Stanford scholarship both with previous scholarship in high school and with the aptitude test for ten of the twelve comparisons made. For the Upper Division transfers the coefficients of correlation are all smaller, but the predictive value of previous scholarship is still evident. From all Division comparisons the relations of previous scholarship and of test scores continue to appear significant as admission selection bases. The coefficients of correlation between (1) previous scholarship average and scholarship average in the first year at Stanford, (2) college aptitude test score and scholarship average in the first year at Stanford, and (3) previous scholarship and college aptitude test score, are given in the following tabulation for various groups of new undergraduate students in 1942-43.

	Correlat- tions (1)	Correlat- tions (2)	Correlat- tions (3)	No. of Students
Lower Division men	.520	.389	.346	518
Lower Division women	.522	.440	.250	393
Lower Division men and women.....	.527	.413	.316	911
Lower Division transfer men.....	.483	.448	.252	101
Lower Division transfer women.....	.422	.421	.282	64
Lower Division transfer men and women.....	.470	.440	.265	165
Upper Division transfer men.....	.476	.136	.228	128
Upper Division transfer women.....	.438	.326	.532	96
Upper Division transfer men and women.....	.466	.202	.353	224
Unweighted averages	.481	.357	.313	

Relations with Armed Services.—During the autumn, winter, and spring quarters co-operation with recruiting services for the enlisted reserves of the Army, Army Air Force, Marine Corps, and Navy constituted a major activity. Individual and joint meetings were arranged for the presentation of the various armed service college programs. Facilities were arranged and provided for interviews and physical examinations by representatives of each of the services. Group qualifying tests were given in April for the Navy and Marine Corps candidates (V-1 and IIId tests). Quarterly reports on reservists with unsatisfactory records were made. In June, records and special reports were prepared for all except the relatively few reservists who were permitted to continue in the University on inactive reserve status after July 1. Because of constantly changing methods of procurement and of relationship, exact figures are not available as to the number of reservists served by the office, but the following is a close approximation.

Navy V-1	306
Navy V-7	144
Marine Corps	112
Army Air Force	112
Enlisted Reserve Corps	312
R.O.T.C. Advanced	201
R.O.T.C. Basic	363
Total	1,550

Beginning with the summer quarter there was a nearly complete change in the situation. Medical school students and a small number of premedical reservists started on a civilian basis, then changed to active military status during the term. The medical reservists had the option of exchanging inactive commission status for subsidized active enlistment with uniform, living, tuition, and monthly pay provided by the government. Reservists of other classifications were ordered to active status and sent to other schools or service training before July 1.

APPOINTMENT SERVICE

School teaching and administrative services.—The supply of candidates for school positions continued to shrink during the second war year, with a decrease of 8.3 per cent in the number of active applicants, as shown in the

following tabulation, and in the fact that only 47 were enrolled in the practice-teaching classes as compared with 66 in the previous year. In contrast to this reduction in supply the demand for teachers as expressed in direct orders increased 15 per cent. Although the number of direct placements was less by 21.5 per cent, the number of unplaced candidates at the end of the year was relatively small, none from the practice-teacher group and 18 from the experienced lists. Comparative figures of candidates, orders, and direct placements for the past five years are as follows:

	1938-39	1939-40	1940-41	1941-42	1942-43
Individuals served	864	895	912	811	744*
Orders	685	699	726	1,007	1,159
Direct placement of teaching candidates	109	140	114	135	106†
Ratio of placements to candidates	12.6%	15.6%	12.5%	16.7%	14.2%

* Includes 86 candidates who received special service but were not on active list. Does not count twice 13 candidates who asked for service for two periods.

† From the point of view of *Orders* this figure represents the following:

- 96 placements on this year's orders
- 1 placement on last year's order
- 1 placement on the initiative of this office
- 8 placements not represented by orders in this report since they were in the non-teaching field

From the point of view of *Candidates* this figure represents the following:

- 101 teaching candidates
- 2 non-teaching candidates
- 1 candidate not registered with the Appointment Service
- 2 non-Stanford University candidates

In addition to the 106 receiving direct placements, 93 others obtained new positions either with the assistance of the office or by their own efforts.

New applicants for administrative and teaching positions, numbering 16 and 58 respectively, constitute a group 24 per cent smaller than in 1941-42. The former registrants who asked for renewal of service included 147 administrative and 450 teaching candidates, less by 56 than the total of 653 the year before. Special types of services were requested by 86 candidates. The 671 candidates for active placement service held as their highest credentials the following:

Administrative—General Secondary	102
Administrative—Various	5
Administrative—Elementary	8
Junior College	20
General Secondary	334
Junior High School	9
Elementary	13
Special	7
Other states	56
None	117
Total	671

Of these candidates 2 held no degree. The highest degrees held by the others were A.B. by 210 (89 Stanford), A.M. by 313 (227 Stanford), Ph.D. by 91 (70 Stanford), and miscellaneous others by 55 (41 Stanford). The preferences for types of positions were:

College and university teaching	186
Private-school teaching	2
Administrative duties	163
Junior college teaching	45
High-school teaching	261
Junior high school teaching	4
Elementary, kindergarten, and primary teaching	10
Total	671

Whereas last year government calls for teachers had shifted the peak of the placement season to the summer months, this year's heaviest demands came more normally in May and June with July and April calls next in volume. The lightest months were September, February, and December.

Among the educational fields represented in the calls for candidates the greatest increases over the previous year were in elementary teaching (55 more calls but only 4 more applicants), English, social science, and administration, among which the supply of candidates was materially larger only in the case of administration. Major decreases occurred in the orders for teachers of physical science, engineering, and mechanical drawing, of mathematics and of shop subjects. All of these had experienced sudden increases in the previous year owing to the needs of training camps and relocation centers.

Relative supply, demand, and success in placement by subject fields and in terms of experience are shown in the following tables.

REGISTRATIONS, ORDERS, AND PLACEMENTS, 1942-1943

Subjects	Registrations	Orders	Placements* (All Types)
Administration	163	97	29
Agriculture	..	3	..
Art	10	21	..
Commercial	19	69	5
Education	30	6	7
Elementary	13	115	6
Engineering	1	10	..
English	91	105	28
English—Oral	33	26	15
Home Economics	5	41	1
Journalism	1	3	..
Languages			
French	13	9	7
General	..	4	..
German	8	2	..
Italian	..	1	..
Latin	1	4	..
Spanish	27	45	7
Librarian	6	10	1

* There were in the non-teaching field 8 No. 1 placements, 1 No. 2 placement, and 1 No. 3 placement; there was 1 No. 1 placement on previous year's order; 1 No. 1 placement on initiative of this office, and 2 No. 1 placements of non-teaching candidates. In reading these figures it should be noted that candidates were not always placed in fields for which they registered, and that subject combinations frequently prevented nominations of candidates with major preparation in the subject indicated as being of primary importance.

Subjects	Registrations	Orders	Placements (All Types)
Mathematics	35	92	20
Music	6	41	4
Nursing	..	5	..
Physical Education			
Men	19	79	8
Women	18	54	5
Psychology	9	18	1
Science—Biological	36	42	12
Science—Physical	35	62	9
Science—Social	22	95	12
Economics	9	..	4
History	43	..	15
Philosophy	2	..	1
Political Science	6	..	2
Religion	1	..	..
Sociology	5	..	..
Shop	4	37	..
General	..	33	..
Not otherwise specified	..	30	..
Total	671	1,159	199

CANDIDATES CLASSIFIED BY PREFERENCE AND DISPOSITION, 1942-1943*

Position for which Registered	Placed and Promoted		Still Available		Returned to Old Position		Returned to School		No Report, Changed Plans, etc.		Total
	Ex- peri- enced	Inex- peri- enced	Ex- peri- enced	Inex- peri- enced	Ex- peri- enced	Inex- peri- enced	Ex- peri- enced	Inex- peri- enced	Ex- peri- enced	Inex- peri- enced	
<i>Administrative</i>											
Academic Dean.....	1	..	..	..	1	..	..	..	..	..	2
Attendance Super- visor.....	1	..	..	..	..	..	..	..	..	..	1
Director of Men.....	..	..	..	..	1	..	..	..	..	..	1
Director of Women....	1	..	..	..	4	..	..	..	1	..	6
Personnel and Research.....	1	1	..	..	4	..	..	..	1	..	7
Ident.....	..	..	..	..	1	..	..	..	..	..	1
Principal.....	16	..	1	..	47	..	2	..	5	..	71
Registrar.....	..	..	..	..	1	..	..	..	1	..	2
Superintendent.....	7	..	2	..	37	..	..	..	3	..	49
Advisor.....	1	1	1	..	12	..	..	..	..	..	15
National Counselor.....	..	..	..	..	7	..	..	..	1	..	8
<i>Teaching</i>											
.....	1	..	..	..	7	..	..	..	2	..	10
Commercial.....	5	..	2	..	10	..	..	..	2	..	19
Education.....	7	..	..	..	19	..	..	..	4	..	30
Elementary.....	4	2	..	..	5	..	..	1	..	1	13
Engineering.....	..	..	..	..	1	..	..	..	..	..	1
Fish.....	25	4	6	..	37	..	8	..	14	2	91
Fish—Oral.....	9	6	..	..	10	1	..	..	7	..	33
Home Economics....	1	..	1	..	2	..	..	..	1	..	5
Journalism.....	..	..	..	..	1	..	..	..	..	..	1

The total number of dispositions of experienced and inexperienced candidates (671) includes 15 placements in non-teaching fields. Only 668 individuals were served; however, candidates who asked for two periods of service are represented twice.

CANDIDATES BY PREFERENCE AND DISPOSITION (Continued)

Position for Which Registered	Placed and Promoted		Still Available		Returned to Old Position		Returned to School		No Report, Changed Plans, etc.		Total
	Ex-perienced	Inex-perienced	Ex-perienced	Inex-perienced	Ex-perienced	Inex-perienced	Ex-perienced	Inex-perienced	Ex-perienced	Inex-perienced	
Languages											
French.....	7	..	..	..	4	..	..	..	2	..	13
German.....	..	..	..	..	5	..	..	1	2	..	8
Latin.....	..	..	..	..	1	..	..	..	..	..	1
Spanish.....	4	3	..	..	15	..	1	..	4	..	27
Library.....	1	..	..	..	3	1	..	..	1	..	6
Mathematics.....	19	2	1	..	13	..	..	..	..	..	35
Music.....	3	1	..	..	2	..	..	..	..	..	6
Physical Educ.											
Men.....	7	2	..	..	7	..	..	..	3	..	19
Women.....	5	1	..	..	9	..	..	1	2	..	18
Psychology.....	1	..	2	..	3	..	..	..	3	..	9
Science—Biological	10	2	..	..	16	1	..	..	4	3	36
Science—Physical..	9	..	1	..	22	..	..	..	3	..	35
Science—Social.....	10	2	..	1	7	..	..	..	2	..	22
Economics.....	4	..	..	..	4	..	..	..	1	..	9
History.....	13	3	..	..	15	2	1	1	6	2	43
Philosophy.....	..	1	..	..	1	..	..	..	..	..	2
Political Science..	2	..	..	..	3	..	..	..	..	1	6
Religion.....	..	..	..	..	..	1	..	..	..	..	1
Sociology.....	..	..	..	..	3	..	..	..	1	1	5
Shop.....	1	..	..	..	3	..	..	..	..	..	4
Total.....	176	31	17	1	345	6	7	4	76	10	671

DISPOSITION OF CANDIDATES, TEACHING AND ADMINISTRATIVE, 1942-1943

	Men		Women		Total*
	Ex-perienced	Inex-perienced	Ex-perienced	Inex-perienced	
Placed by office	39	1	41	20	101
Placed through transmittal of recommendations	14	2	16	4	36
Placed on own efforts	36	1	21	4	62
Promoted	5	..	3	..	8
Unplaced	8	1	9	..	18
Returned to same teaching position	208	..	107	..	315
Returned to same non-teaching position	24	..	10	..	34
Returned to school	4	..	3	4	11
Married	..	..	3	1	4
Health	..	..	1	1	2
Changed plans	18	2	20	5	45
No report	19	2	14	..	35
Total	375	9	248	39	671

* Of the total, 13 were counted twice because they were on the active books twice during the year. Of the 101 direct placements, 8 were made in the non-teaching field; of the 36 placements made through transmittal of recommendations, 1 was made in the non-teaching field; of the 62 self-placements, 7 were made in the non-teaching field. Of the 101 direct placements, 1 was from an order of the previous year, and 1 was on the initiative of this office.

REPORT ON PRACTICE TEACHERS

STUDENTS REGISTERED FOR EDUCATION 200, 205, 205d (STUDENT TEACHING)
AND 305 (INTERNSHIP)

	1941-42			1942-43		
	Men	Women	Total	Men	Women	Total
Placed by the University	9	16	25	0	13	13
Placed with assistance of University recommendations	0	4	4	2	4	6
Placed by self	4	5	9	0	5	5*
Unplaced though fully available	0	1	1	0	0	0
Promoted	0	0	0	1	1	2
Returned to school	0	2	2	0	1	1
Unplaced because of marriage	0	2	2	0	1	1
Deceased	0	1	1	0	0	0
Changed plans	5	0	5	1	3	4
Not reported	0	0	0	0	1	1
	18	31	49	4	29	33
Registered for business and other services	6	2	8	4	6	10
Not registered with Appointment Service	5	4	9	2	2	4
	29	37	66	10	37	47
Total students registered in practice- teaching courses	29	37	66	10	37	47

* Including four women placed in non-teaching positions.

Non-teaching positions.—Wartime conditions of 1942-43 were accompanied by a marked decrease in activity in placement service for other than teaching positions. There were 36 per cent fewer applicants for positions, 48 per cent fewer calls for candidates, and a 33 per cent decrease in the number of direct placements made as compared with the previous year. The proportion of candidates placed remained at a level similar to those of previous years—more than 1941-42 but not quite up to the peak of 1940-41. The comparative figures for five years follow.

	1938-39	1939-40	1940-41	1941-42	1942-43
Individuals served	664	599	598	546	348*
Orders	595	595	858	1,172	605
Direct placement of non-teaching candi- dates on the year's active list	178	155	187	147	99†
Ratio of placements to registration	26.8%	25.9%	31.2%	26.9%	28.5%

* Includes 25 candidates who received special service but were not on the active list. Includes 26 candidates who were registered for record service. Does not count twice 7 candidates who asked for service for two periods and 1 candidate who asked for service for three periods.

† For additional placements see detailed report on candidates and orders.

The list of active candidates for placement included 306 persons of whom 6 were non-recommendable. Students numbered 138, employed persons 111, unemployed 57; 155 were men, 151 women; 120 were new registrants, 186 renewed previous registrations. Special service was requested by 51 additional individuals. New positions were secured by 181 in addition to 23 who joined the Armed Services. The 59.1 per cent finding new positions not in the

Armed Services is comparable with 53.6 per cent in 1941-42. At the close of the placement season only five recommendable candidates remained unemployed.

Peak loads of orders for candidates came at seasons similar to those of 1941-42, this year in October, May, and November, with lightest loads in July and August.

The following tabulation gives the number of orders calling for persons of various qualifications. Of these, 246 were for unspecified numbers of individuals, 72 for business positions, 80 in engineering fields, 60 in science, 30 in personnel and welfare, and 4 miscellaneous.

NON-TEACHING ORDERS

	Students	Alumni	Either	Total
Accounting	7	24	3	34
Advertising	..	4	..	4
Bacteriology	..	1	..	1
Chemistry	17	54	18	89
Dietetics	..	1	..	1
Engineering				
Civil	3	5	1	9
Electrical	..	4	4	8
Industrial	5	7	..	12
Sales	..	2	1	3
Mechanical	4	31	5	40
Mining	2	18	1	21
General (usually all types of above acceptable)	55	8	4	67
Non-professional	..	3	6	9
Entomology	..	2	..	2
Farming	..	1	..	1
Foreign service	..	2	..	2
Forestry	..	..	1	1
Geology	..	12	..	12
Hotel management	..	2	..	2
Insurance	2	8	1	11
Journalism	..	5	..	5
Library	..	6	..	6
Manufacturing	5	9	1	15
Merchandising	1	9	..	10
Nursing	..	1	..	1
Office	6	195	10	211
Personnel	2	35	1	38
Physics	3	5	5	13
Psychiatric social work	..	2	..	2
Public service	1	11	..	12
Recreation	..	6	..	6
Sales	..	2	..	2
Statistics	1	15	2	18
Translation	..	..	1	1
Transportation	2	18	7	27
Welfare	..	31	..	31
Not otherwise specified	1	14	4	19
Total	117	553	76	746

Further details as to the nature and sources of employment calls will be found in the following table.

NATURE AND SOURCE OF EMPLOYMENT CALLS 1942-1943

Field of Occupation	For Whom Requests Received			From Whom Requests Received			
	Graduating Students	Alumni	Either	Profit Organization	Non-Profit Organization	Government	Individual
Engineering	25	310	25	191	98	64	7
Science	69	78	22	127	20	21	1
Business	21	85	23	86	25	18	0
Religion and welfare	2	74	1	15	26	36	0
Arts and sciences	6	5	0	5	2	4	0
Total	123	552	71	424	171	143	8

Engineering business calls resulted in 15.6 per cent direct placements, the engineering 23.7 per cent, the science 7 per cent, and the personnel and welfare 0.4 per cent. No placements were made in the miscellaneous group. The results of the service for the candidates in each occupational classification are shown in the following table.

RESULTS FOR NON-TEACHING CANDIDATES, BY OCCUPATIONS DESIRED*

Positions for Which Registered	Placements and Promotions		Still Available		Returned to Old Position		Returned to School		Entered Service, Changed Plans, etc.		Totals	
	M†	W†	M	W	M	W	M	W	M	W	M	W
Engineering	2	2	..	..	3	..	..	..	1	2	6	4
Science	..	3	..	..	..	2	..	..	1	..	1	5
Business	1	..	..	..	..	..	..	..	..	..	1	..
Religion	14	2	1	..	10	1	4	..	4	1	33	4
Arts and sciences	8	..	..	..	..	..	1	..	6	..	15	..
Medical	14	..	..	..	4	..	..	..	2	..	20	..
Technical	4	..	..	..	1	..	..	..	..	..	5	..
Unskilled	23	2	..	..	6	..	..	..	6	1	35	3
Other	5	..	..	..	..	..	1	..	2	..	8	..
Foreign	..	..	..	..	1	..	..	..	..	..	1	..
Other	..	..	..	..	1	..	..	..	..	..	1	..
Other	1	..	..	..	..	..	..	..	..	..	1	..
Decorating	..	..	..	..	..	..	..	..	1	..	..	1
Other	4	..	..	..	..	..	..	..	..	..	..	4
Other	..	..	..	..	..	..	..	..	1	..	..	1
Constructing	1	..	..	..	..	..	..	..	..	..	1	..
Advertising	1	..	..	..	..	..	..	..	..	..	..	1
Other	55	..	4	..	1	13	..	2	..	11	1	85
Religion	7	21	..	..	2	4	..	1	1	3	10	29
Other	1	..	..	..	..	..	..	..	1	..	1	1
Service	..	..	..	..	..	..	..	..	1	..	..	1
Service	2	1	..	..	..	..	..	..	1	1	2	2
Other	..	..	..	..	1	..	..	..	1	..	2	..
Other	2	..	..	..	2	..	..	..	1	..	5	..
Other	1	2	..	..	..	..	..	..	1	1	2	3
Other	1	..	..	..	..	..	..	..	..	..	..	1
Other	1	..	..	..	..	..	1	..	1	1	2	2
Other	2	..	..	..	2	..	..	..	2	..	2	4
Total	84	97	1	4	34	20	7	3	28	26	155	151

*This table counts twice 7 candidates who asked for service during two periods and date who asked for service during three periods.

†f indicates men; W indicates women.

STUDENT EMPLOYMENT

The total number of students registered with the Student Employment Office for part-time work or for full-time temporary work was 531 as compared to a total of 1,005 during the academic year 1941-42. Of this number, 328 were men and 203 were women. Less than half as many men were seeking assistance from this office as were wanting assistance during the previous year. Before each of the four quarters was over, approximately 20 per cent of the men asking for work indicated that they had secured enough employment for the rest of the quarter and that they no longer wished to be called for jobs. In some cases they said that they would be interested in work only if it paid a relatively high hourly rate or if it were in their major field of interest. The number of students obtaining employment was 304, or 57.25 per cent of those registered for work. In addition, 107 students who were not formally registered with this office, because they were not sufficiently in need of work to be actively seeking it, were placed in part-time or full-time temporary jobs. Although only 11.38 per cent of the students registered in the University asked for work through this office, the percentage of students actually earning some portion of their expenses was somewhat higher than this. When registration books were filed with the Registrar's Office each quarter, approximately 175 students said that they already had a sufficient amount of work to meet their expenses. It is interesting to note that, although 203 women registered for work, at no time did more than 153 of them say that they really needed to earn part of their expenses. On the other hand, although the total number of men registered for work was 328, approximately twice that number indicated that they were earning some part of their way.

RECORD OF PART-TIME EMPLOYMENT

	Men	Women
Enrolment in the University	2,807	1,853
Registrations for part-time employment	328	203
Percentage registered	11.68	10.95
Number employed	177*	127†
Ratio employed to registered	53.96	62.56

* This figure includes 24 men who obtained NYA work only.

† This figure includes 7 women who obtained NYA work only.

ORDERS AND PLACEMENTS FOR PART-TIME WORK

Part-time orders	1,286
Number of workers requested	1,540
Placements	683

The figures above cover direct placements only. Since the part this office had in filling the calls for "hashers" on the campus was limited to giving out application blanks to be submitted to the Director of Dining Halls, students placed in board jobs in the University dining halls are not included.

The types of work most frequently requested on a part-time basis were manual labor, gardening, clerical work, care of children, typing, and housework. The greatest portion of unfilled orders came among the calls for

gardeners, housework, and manual labor. The highest proportion of placements came in the requests for clerical help, typing, and library work.

During vacation periods, 198 students asked for full-time temporary work. This number is approximately half as great as the group available for vacation work during the previous year. Also applying for full-time work were 77 non-Stanford candidates who wished to be considered for positions on the campus if no suitable Stanford candidates were available. Twenty-six of these were wives of students assigned to Stanford on the Army Specialized Training Program. The most frequent calls on a full-time basis were for general office work, manual labor, and store clerk.

RECORD OF FULL-TIME TEMPORARY EMPLOYMENT

Stanford students registered	198
Non-Stanford registrations	177
Temporary full-time orders	171
Number of workers requested	294
Placements	205

The National Youth Administration allocated \$17,280 to Stanford University to be used during the year to provide work for worthy and needy students. This program was directed by the NYA Committee consisting of Dr. J. P. Mitchell (chairman), Dean John Bunn, Dr. Karl M. Cowdery, Mr. E. S. Erwin, Dr. H. Donald Winbigler, Dean Mary Yost, and Miss Adelaide Palmer who supervised the administrative details. Between September and June, 19 graduate students and 40 undergraduate students worked on the program, making a total of 59 individuals who qualified for assignment under the NYA rules. Before the autumn quarter was over, it became evident that the allotment of \$5,780 for the quarter was not going to be needed to cover the payrolls for the period; so \$3,000 was returned to the NYA State office. During the winter quarter, the number of students applying for NYA assistance did not increase; so \$4,000 of the \$6,000 available for that quarter was released. Very few new applications for spring quarter were received with the result that only a small portion of the \$5,500 allotted for that quarter was needed. A total of \$12,733.79 was unused at the end of the year.

NYA EXPENDITURES

	Under-graduate	Graduate
September-October, 1942	\$ 361.73	\$ 232.35
October-November, 1942	523.40	294.40
November-December, 1942	346.88	243.10
December, 1942-January, 1943	357.35	265.35
January-February, 1943	392.20	285.10
February-March, 1943	247.30	223.10
March-April, 1943	240.50	52.00
April-May, 1943	226.25	59.20
May-June, 1943	163.00	33.00
Total	\$2,858.61	\$1,687.60
Total allotment for the year.....	\$17,280.00	
Total payroll for the year.....	4,546.21	
Total unexpended balance for the year.....	\$12,733.79	

ADMINISTRATIVE REPORTS

NUMBER OF STUDENTS EMPLOYED UNDER NYA

	Graduate		Undergraduate		Totals
	Men	Women	Men	Women	
Autumn quarter	11	3	21	10	45
Winter quarter	12	3	15	9	39
Spring quarter	2	3	11	6	22

Since the number of students applying for work on the NYA program was very limited and since many who did apply worked for only one or two payroll periods after they were assigned to a project, it was possible to fill only a small portion of the requests for help made by the various departments. The types of work to which students were assigned are shown below.

NYA PROJECT ASSIGNMENTS

	Autumn Quarter		Winter Quarter		Spring Quarter	
	No. of Requests	Place-ments	No. of Requests	Place-ments	No. of Requests	Place-ments
Construction and repair of equipment	6	1	5	1	1	1
Health, sanitation, hospital, and clinical assistance	4	1	1	1	1	..
Clerical assistance	13	15	25	13	13	8
Library services	25	6	10	4	4	2
Research, statistical, and survey projects	25	9	13	5	5	2
Classroom and laboratory assistance	22	8	13	9	9	4
Other projects	15	7	7	5	5	5
Totals	110	47	74	38	38	22

ENROLMENT DATA

TABLE I

COMPARATIVE TOTAL REGISTRATION

	1939-40	1940-41	1941-42	1942-43
Old students	3,472	3,503	3,206	2,987
New students	1,770	1,676	1,880	1,673
Army Specialized Training Unit .....	....	....	....	1,341
Total	5,242	5,179	5,086	6,001
Percentage of returning students	66.2	67.6	63.0	64.1*
Number from California	3,868	3,854	3,841	3,623*
Number from other states and foreign countries	1,374	1,325	1,245	1,037*
Percentage from outside California	26.2	25.6	24.5	22.3*

* Based on civilian student population of 4,660.

TABLE II
AVERAGE AGE OF MATRICULANTS

	1939-40	1940-41	1941-42	1942-43
Graduate standing	27.95	27.80	27.92	28.88
Advanced standing:				
Upper Division	21.03	21.10	20.71	21.33
Lower Division	19.40	19.82	19.41	19.77
First-year standing	18.13	18.17	18.03	17.83
Special standing	43.60	37.49	24.54	39.25

TABLE III
AGE OF FRESHMEN AT MATRICULATION

	1939-40	1940-41	1941-42	1942-43
Under 16 years	0	0	1	4
16-17 years	29	23	30	74
17-18 years	245	255	418	481
18-19 years	327	363	460	336
19-20 years	58	58	52	25
Over 20 years	15	15	11	12

TABLE IV
DISTRIBUTION OF NEW STUDENTS

	1939-40	1940-41	1941-42	1942-43
From colleges:				
With graduate standing	498	457	309	262
With advanced standing:				
Upper Division	200	184	214	279
Lower Division	88	73	100	20
Total	786	714	623	561
From normal schools and teachers colleges.....	5	2	4	4
From junior colleges	305	242	281	165
From hospital training schools.....	2	0	0	0
From preparatory schools:				
On recommendation:				
Private	181	211	267	197
Public	482	493	692	722
On examination	6	7	8	6
Special students	3	7	5	18
Total	1,770	1,676	1,880	1,673*

* Does not include 1,341 students enrolled in the Army Specialized Training Program.

TABLE V
SUMMER QUARTER STATISTICS

	1940	1941	1942
Old students	644	756	1,521
New students	223	275	515
Total	867	1,031	2,036
Graduate standing	574	579	619
Undergraduate standing	293	452	1,417
Total	867	1,031	2,036
New:			
Graduate standing	120	125	63
Advanced standing:			
Upper Division	29	54	98
Lower Division	26	29	75
First-year standing	48	63	279
Special standing	0	4	0
Total	223	275	515

* Does not include 1,292 students enrolled in the Army Specialized Training Program.

TABLE VI
NEW STUDENTS OF 1942-43 AND FIRST-YEAR RECORD

No. of Schools	Type of School	No. of Matricu- lants	Average Test Score	Percentage Doing Satisfactory Work	A C F
<i>Graduate Students</i>					
92	Universities and colleges	252	.....	.....	
10	Foreign advanced institutions	10	.....	.....	
102	Total for graduates	262	.....	.....	
<i>Undergraduate Students</i>					
82	Universities and colleges	293	80.40	78.32	
5	Foreign advanced institutions	6	91.50	83.33	
3	Normal schools and teachers colleges...	4	74.75	75.00	
44	Junior colleges	165	77.15	74.23	
High schools:					
83	Private	202	81.65	74.24	
233	Public	722	77.02	74.97	
	Special students	18	69.20	88.24	
450	Total for undergraduates	1,410	78.40	75.67	

TABLE VII

GRADUATE STUDENTS

FROM COLLEGES, UNIVERSITIES, STATE TEACHERS COLLEGES, AND NORMAL
SCHOOLS IN THE UNITED STATES AND POSSESSIONS

	No. of Students 1940-43		No. of Students 1940-43
<i>Alabama</i>		<i>Connecticut</i>	
Alabama College	1	Connecticut, University of	2
Alabama, University of	1	Trinity College	1
<i>Arizona</i>		Wesleyan University	1
Arizona State Teachers College, Flagstaff	2	Yale University	9
Arizona State Teachers College, Tempe	3	<i>District of Columbia</i>	
Arizona, University of	9	Catholic University of America..	1
<i>California</i>		George Washington University...	1
California Institute of Technology	4	<i>Florida</i>	
California, University of	142	Florida State College for Women	1
California, University of, at Los Angeles	32	Rollins College	1
Chico State College	6	<i>Georgia</i>	
Claremont Colleges	5	Atlanta University	2
Fresno State College	21	Emory University	1
Holy Names, College of the	5	<i>Hawaii</i>	
Humboldt State College	3	Hawaii, University of	5
Loyola University	1	<i>Idaho</i>	
Mills College	12	Idaho, University of	9
Occidental College	5	Idaho, University of, Southern Branch	1
Pacific, College of the	10	<i>Illinois</i>	
Pacific Union College	1	Bradley Polytechnic Institute....	1
Pasadena College	2	Chicago, University of	8
Pomona College	17	Illinois, University of	5
Redlands, University of	7	Northwestern University	9
St. Joseph's College	1	Rockford College for Women....	1
St. Mary's College	3	The Principia	2
San Diego State College	8	<i>Indiana</i>	
San Francisco College for Women	4	Indiana University	3
San Francisco State College	40	Notre Dame, University of	2
San Francisco, University of	14	Purdue University	1
San Jose State College	108	Wabash College	1
Santa Barbara State College	6	<i>Iowa</i>	
Santa Clara, University of	6	Clarke College	1
Scripps College	4	Cornell College	1
Southern California, University of	16	Iowa State College of Agriculture and Mechanic Arts	1
Whittier College	6	Iowa State Teachers College....	1
<i>Colorado</i>		Iowa, State University of	3
Adams State Teachers College of Southern Colorado	1	Morningside College	1
Colorado State College of Agricul- ture and Mechanic Arts	3	<i>Kansas</i>	
Colorado State College of Educa- tion	7	Kansas State College of Agricul- ture and Applied Science	2
Colorado, University of	7	Kansas, University of	3
Denver, University of	4	Washburn College	2
Western State College of Colorado	1	Wichita, University of	1

TABLE VII (Continued)

	No. of Students 1940-43		No. of Students 1940-43
<i>Kentucky</i>		<i>New Mexico</i>	
Asbury College	1	New Mexico School of Mines....	1
Kentucky, University of.....	1	New Mexico, University of.....	3
<i>Louisiana</i>		<i>New York</i>	
Louisiana Polytechnic Institute..	1	Alfred University	1
Louisiana State University.....	3	Buffalo, University of	2
<i>Maine</i>		City of New York, College of the	1
Colby College	1	Colgate University	1
<i>Massachusetts</i>		Columbia University	33
Amherst College	2	Cornell University	4
Boston University	4	Hunter College	1
Harvard University	16	Manhattanville College of the Sa- cred Heart	1
Massachusetts State College.....	1	New York State College for Teachers	1
Mount Holyoke College.....	3	New York University	2
Simmons College	1	Queens College	1
Smith College	1	Rensselaer Polytechnic Institute..	1
Wellesley College	1	Rochester, University of.....	1
Williams College	3	Syracuse University	2
Worcester Polytechnic Institute..	1	Vassar College	2
<i>Michigan</i>		<i>North Carolina</i>	
Michigan College of Mining and Technology	1	Duke University	2
Michigan State College	2	North Carolina, University of....	1
Michigan, University of	5	<i>North Dakota</i>	
Wayne University	1	North Dakota, University of.....	4
<i>Minnesota</i>		<i>Ohio</i>	
Minnesota, University of.....	7	Antioch College	1
St. Olaf College	2	Denison University	1
Saint Teresa, College of.....	1	Kenyon College	1
<i>Mississippi</i>		Marietta College	1
Mississippi, University of	1	Muskingum College	1
<i>Missouri</i>		Oberlin College	3
Harris Teachers College.....	1	Ohio State University	7
Lincoln University	1	Ohio Wesleyan University.....	3
Missouri, University of	9	Wooster, The College of.....	3
St. Louis University	3	<i>Oklahoma</i>	
<i>Montana</i>		Oklahoma, University of.....	7
Montana, University of	3	<i>Oregon</i>	
<i>Nebraska</i>		Linfield College	2
Duchesne College	2	Oregon State College	14
Hastings College	1	Oregon, University of	18
Nebraska, University of.....	2	Pacific University	1
Omaha, University of.....	1	Portland, University of.....	1
<i>Nevada</i>		Reed College	8
Nevada, University of.....	10	Willamette University	3
<i>New Hampshire</i>		<i>Pennsylvania</i>	
Dartmouth College	1	Bryn Mawr College	3
<i>New Jersey</i>		Carnegie Institute of Technology..	1
Princeton University	8	Pennsylvania State College.....	3
		Pennsylvania, University of....	5
		Temple University	1
		Washington and Jefferson College	1

TABLE VII (Continued)

	No. of Students 1940-43		No. of Students 1940-43
<i>ico</i>		<i>Virginia</i>	
Rico, University of.....	1	Virginia, University of.....	1
<i>land</i>		<i>Washington</i>	
University	3	Gonzaga University	3
Peabody College for		Puget Sound, College of.....	2
hers	2	St. Martin's College	1
see, University of.....	1	Seattle Pacific College.....	1
		Washington State College.....	10
tural and Mechanical Col-		Washington, University of.....	33
.....	2	Western Washington College of	
n Methodist University...	1	Education	1
est Texas State Teachers		Whitman College	2
ge	1	<i>West Virginia</i>	
Christian University.....	1	West Virginia University.....	1
State College for Women..	2	<i>Wisconsin</i>	
University of	6	Marquette University	1
n Young University.....	8	Wisconsin, University of.....	7
ate Agricultural College..	6	<i>Wyoming</i>	
University of	14	Wyoming, University of.....	1

FROM FOREIGN ADVANCED INSTITUTIONS

	No. of Students 1940-43		No. of Students 1940-43
		<i>England</i>	
, University of.....	1	Cambridge University	1
in University	1	Leeds, University of.....	1
		Oxford University	1
a, State University of....	1	Royal College of Physicians and	
		Surgeons	1
		<i>France</i>	
, University of.....	3	Ecole Libre des Sciences Poli-	
Columbia, University of..	3	tiques in Paris	1
University	2	<i>Germany</i>	
aa, University of.....	1	Berlin, University of.....	1
hewan, University of.....	1	Handelshochschule, Berlin	1
, University of.....	1	Heidelberg, University of.....	1
		Technische Hochschule, Munich..	1
University of	3	Tubingen, University of	1
idad Católica	1	<i>Holland</i>	
		Amsterdam, University of.....	1
: University	1	Leiden, University of.....	1
ong, University of.....	1	<i>India</i>	
n University	1	Punjab, University of the.....	1
a University	3	<i>Italy</i>	
d Northeastern University	1	Genoa, University of.....	1
d Sun-Yat-Sen University	1	<i>Peru</i>	
ig University	3	San Marcos, University of.....	1
A. College	1		

TABLE VII (*Concluded*)

	No. of Students 1940-43	
<i>Philippine Islands</i>		<i>Switzerland</i>
Philippines, University of the....	1	Lausanne, University of.....
<i>Scotland</i>		<i>Turkey</i>
Glasgow, University of.....	1	Istanbul, American College...

TABLE VIII

UNDERGRADUATE STUDENTS
FROM UNIVERSITIES AND COLLEGES IN THE UNITED STATES
AND POSSESSIONS

	No. of Students 1940-43	Percentage Satis- factory
<i>Alaska</i>		
Alaska, University of	1	100
<i>Arizona</i>		
Arizona, University of	8	75
<i>California</i>		
California Institute of Technology.....	10	70
California Polytechnic Institute	1	100
California, University of	107	86
California, University of, College of Agriculture..	2	100
California, University of, at Los Angeles.....	45	87
Chico State College	10	100
Dominican College	3	67
Fresno State College	25	83
Humboldt State College	4	50
Immaculate Heart College	3	67
Loyola University	5	60
Mills College	27	73
Occidental College	18	100
Pacific, College of the	2	100
Pacific Union College	2	50
Pomona College	25	84
Redlands, University of	7	72
St. Mary's College	1	0
San Diego College	21	76
San Francisco College for Women	4	75
San Francisco State College	31	81
San Francisco, University of	5	75
San Jose State College	70	80
Santa Barbara State College	15	79
Santa Clara, University of	9	56
Scripps College	13	85
Southern California, University of	16	88
Whittier College	4	100
<i>Colorado</i>		
Colorado College	6	80
Colorado School of Mines	1	100
Colorado State College of Agriculture and Me- chanic Arts	1	100
Colorado, University of	12	75
Denver, University of	6	80
Western State College of Colorado	1	100

TABLE VIII (Continued)

	No. of Students 1940-43	Percentage Satis- factory	Grade- Point Rating
<i>Connecticut</i>			
Connecticut College	3	67	2.35
Connecticut, University of	1	100	3.92
Trinity College	1	0	1.59
Yale University	4	100	3.25
<i>District of Columbia</i>			
George Washington University	2	100	2.54
<i>Hawaii</i>			
Hawaii, University of	10	60	2.86
<i>Idaho</i>			
Idaho, College of	1	100	2.89
Idaho, University of	4	100	3.18
<i>Illinois</i>			
Chicago, University of	8	71	2.80
Illinois, University of	1	100	3.06
Knox College	1	100	2.55
Monmouth College	4	75	3.02
Northwestern University	5	100	2.79
The Principia	3	33	1.94
<i>Indiana</i>			
De Pauw University	2	100	2.41
Notre Dame, University of	1	100	2.49
Purdue University	2	50	1.83
<i>Kansas</i>			
Kansas State College of Agriculture and Applied Science	2	50	3.37
Kansas, University of	1	100	2.33
Wichita, University of	2	50	2.90
<i>Louisiana</i>			
Centenary College	1	Leave	....
<i>Maryland</i>			
Johns Hopkins University	2	100	3.18
Maryland, University of	1	100	2.79
St. John's College	1	100	3.53
<i>Massachusetts</i>			
Boston University	2	100	2.31
Harvard University	2	100	2.95
Holy Cross, College of	1	100	2.28
Massachusetts Institute of Technology	2	100	2.73
Mt. Holyoke College	2	50	2.13
Simmons College	1	100	3.07
Smith College	13	85	2.81
Wellesley College	8	100	2.98
Wheaton College	2	100	2.88
Williams College	1	100	4.00
<i>Michigan</i>			
Albion College	1	0	1.67
Battle Creek College	1	100	3.33
Kalamazoo College	1	Leave	....
Michigan State College	1	100	2.85
Michigan, University of	3	33	1.78

TABLE VIII (Continued)

	No. of Students 1940-43	Percentage Satis- factory	Grade- Point Rating
<i>Minnesota</i>			
Carleton College	1	100	3.08
Minnesota, University of	4	75	2.70
<i>Missouri</i>			
Lindenwood College	2	100	2.15
Missouri, University of	2	100	2.51
Washington University	2	100	2.92
<i>Montana</i>			
Montana State College	1	100	....
Montana State University	2	100	3.39
Northern Montana College	1	0	1.21
<i>Nebraska</i>			
Nebraska, University of	3	50	2.25
<i>Nevada</i>			
Nevada, University of	5	75	1.85
<i>New Hampshire</i>			
Dartmouth College	5	80	2.49
<i>New Jersey</i>			
Princeton University	5	80	2.28
<i>New Mexico</i>			
New Mexico, University of	2	100	....
<i>New York</i>			
City of New York, College of the	1	100	2.89
Columbia University	3	100	2.65
Cornell University	4	75	2.52
Manhattanville College of the Sacred Heart	2	50	1.70
New York University	1	100	2.32
Rensselaer Polytechnical Institute	2	100	2.69
Rochester, University of	1	100	2.00
St. Lawrence University	1	100	2.75
Skidmore College	1	100	2.67
Vassar College	4	100	2.51
Wells College	2	100	2.95
<i>North Carolina</i>			
Duke University	1	100	2.15
<i>Ohio</i>			
Cincinnati, University of	1	100	3.00
Denison University	1	0	0.73
Miami University	2	100	2.72
Oberlin College	1	100	2.48
Western Reserve University	1	100	3.18
Wittenberg College	1	100	2.47
<i>Oklahoma</i>			
Oklahoma Agricultural and Mechanical College ...	1	100	3.45
Oklahoma, University of	2	100	2.38
<i>Oregon</i>			
Linfield College	1	100	3.00
Oregon State College	11	80	2.24
Oregon, University of	34	82	2.42
Portland, University of	1	100	2.18
Reed College	14	71	2.56
Willamette University	1	100	2.62

TABLE VIII (Continued)

	No. of Students 1940-43	Percentage Satis- factory	Grade- Point Rating
<i>Pennsylvania</i>			
Allegheny College	1	0	1.66
Bryn Mawr College	4	100	3.60
Bucknell University	1	100	2.69
Carnegie Institute of Technology	2	100	3.02
Pennsylvania State College	1	100	2.68
Pennsylvania, University of	1	100	2.47
Rosemont College	1	100	2.60
Swarthmore College	2	50	2.69
Villanova College	1	100	2.05
Washington and Jefferson College.....	1	0	0.38
<i>Rhode Island</i>			
Brown University	2	100	2.38
<i>Tennessee</i>			
Vanderbilt University	2	0	1.78
<i>Texas</i>			
Texas State College for Women	1	100	2.80
Texas Technological College	1	100	2.25
Texas, University of	3	100	2.64
<i>Utah</i>			
Agricultural College of Utah	1	100	3.67
Brigham Young University	3	67	3.25
St. Mary-of-the-Wasatch, College of	1	100	2.28
Utah, University of	20	85	2.71
<i>Vermont</i>			
Bennington College	3	100	3.05
<i>Virginia</i>			
Mary Washington College	1	100	2.84
Randolph-Macon Woman's College	1	0	1.00
Richmond, University of	1	100	2.67
Virginia Military Institute	1	100	3.04
Virginia, University of	1	100	2.29
Washington and Lee University	1	0	0.23
William and Mary, College of	1	100	2.76
<i>Washington</i>			
Gonzaga University	4	50	1.65
Puget Sound, College of	3	67	2.40
Washington State College	6	100	2.71
Washington, University of	20	90	2.89
Whitman College	1	100	3.84
<i>Wisconsin</i>			
Wisconsin, University of	2	100	3.11
<i>Wyoming</i>			
Wyoming, University of	1	0	0.88

FROM FOREIGN ADVANCED INSTITUTIONS

	No. of Students 1940-43	Percentage Satis- factory	Grade- Point Rating
<i>Argentina</i>			
Universidad de Buenos Aires	1	0	1.15
<i>Brazil</i>			
Brazilian Aeronautical Academy	1	100	3.16

TABLE VIII (Continued)

	No. of Students 1940-43	Percentage Satis- factory	Grade- Point Rating
<i>Canada</i>			
British Columbia, University of.....	1	100	2.29
Manitoba, University of	2	100	3.28
<i>Chile</i>			
Catholic University of Chile	1	100	2.29
<i>China</i>			
St. John's University	5	80	2.52
<i>Denmark</i>			
Royal Technical School	1	100	2.81
<i>France</i>			
Lycée Adolphe Thiers	1	100	2.96
<i>Germany</i>			
Stuttgart, University of	1	100	3.00
<i>Japan</i>			
Meiji University	1	0	1.30
<i>Peru</i>			
Universidad Catholica	1	0	1.38
<i>Switzerland</i>			
Geneva College for Women	1	100	3.08
<i>Turkey</i>			
Istanbul, American College	1	100	2.00
Istanbul, University of	1	0	1.92

FROM STATE TEACHERS COLLEGES AND NORMAL SCHOOLS

	No. of Students 1940-43	Percentage Satis- factory	Grade- Point Rating
<i>Arizona</i>			
Arizona State Teachers College, Tempe	1	100	2.76
<i>Colorado</i>			
Colorado State College of Education	3	100	2.47
<i>Minnesota</i>			
State Teachers College, Moorhead	1	100	2.95
<i>Montana</i>			
State Normal College	1	100	2.22
<i>Oregon</i>			
Oregon State College of Education	1	0	1.83
Southern Oregon College of Education	2	100	3.04
<i>Washington</i>			
Eastern Washington College of Education	2	100	2.90

FROM JUNIOR COLLEGES

	No. of Students 1940-43	Percentage Satis- factory	Grade- Point Rating
<i>Arizona</i>			
Phoenix Junior College	4	75	2.33
<i>California</i>			
Antelope Valley Junior College	1	100	2.76
Armstrong Junior College	4	0	1.41
Bakersfield Junior College	17	88	2.48
Brown Military Academy	1	100	2.26

TABLE VIII (Continued)

	No. of Students 1940-43	Percentage Satis- factory	Grade- Point Rating
Junior College	5	60	2.59
State College, Junior College	1	100	2.55
Junior College	2	50	2.13
Junior College	2	50	1.80
School	3	0	1.69
High School Preparatory and Collegiate School ..	2	100	2.70
Junior College	16	81	2.43
Junior College	8	63	2.05
College	4	50	1.98
Junior College	1	100	2.23
High Junior College	15	60	2.16
St. Louis City College	15	60	2.30
Junior College	15	71	2.24
Junior College	68	60	2.15
Junior College	20	80	2.58
University of, College of	2	100	2.89
Junior College	52	79	2.64
Medical Junior College	1	0	1.27
Junior College	11	73	2.40
High Junior College	7	57	2.27
Junior College	5	80	2.92
Junior College	13	77	2.74
High Junior College	32	88	2.69
Junior College	11	80	2.31
St. Louis County Junior College	3	33	1.89
Cardinal Valley Junior College	7	100	2.34
San Francisco Junior College	26	54	2.19
State College, Junior College	56	79	2.57
Obispo Junior College	2	50	2.11
San Francisco Junior College	104	65	2.29
San Junior College	1	100	2.20
Marina Junior College	2	100	2.69
Monica Junior College	15	50	2.01
San Junior College	13	69	2.41
Junior College	22	62	2.03
Junior College	10	100	2.53
Junior College	6	100	2.39
County Junior College	9	88	2.06
<i>Columbia</i>			
Junior College	1	100	2.46
St. Bernard Seminary	1	100	2.67
Junior College	5	100	2.72
University of, Southern Branch	5	80	2.51
<i>Shimer</i>			
Junior College	1	0	1.50
Township Junior College	1	0	1.72
Junior College	1	100	2.81
<i>Park</i>			
College	1	0	0.86
<i>St. Louis</i>			
Junior College	2	100	2.71
North Junior College	1	100	2.80

ADMINISTRATIVE REPORTS

TABLE VIII (Continued)

	No. of Students 1940-43	Percentage Satis- factory	Grade- Point Rating
<i>Michigan</i>			
Gogebic Junior College	1	100	3.59
Highland Park Junior College	1	0	1.67
<i>Missouri</i>			
Christian College	1	100	2.22
Jefferson College	1	100	2.93
Kansas City Junior College	2	100	3.14
Kemper Military School	1	0	1.82
St. Joseph Junior College	1	100	2.98
Stephens College	13	77	2.55
<i>New Hampshire</i>			
Colby Junior College	1	100	2.10
<i>New Mexico</i>			
Eastern New Mexico College	1	0	1.38
New Mexico Military Institute	11	55	2.11
<i>New York</i>			
Bennett Junior College	1	0	1.63
Finch Junior College	1	0	1.93
<i>Oregon</i>			
St. Helen's Hall Junior College	2	100	2.39
<i>Pennsylvania</i>			
Ogontz Junior College	1	0	1.21
<i>Tennessee</i>			
Ward Belmont College	1	100	2.25
<i>Texas</i>			
Hardin Junior College	1	100	2.37
Hockaday Junior College	1	100	2.62
<i>Utah</i>			
Branch Agricultural College	1	100	2.52
Weber College	2	0	1.37
Westminster College	1	0	1.61
<i>Washington</i>			
Mount Vernon Junior College	2	50	2.34
<i>West Virginia</i>			
Greenbrier College	1	100	3.07

FROM PREPARATORY SCHOOLS IN THE UNITED STATES AND POSSESSIONS

	No. of Students 1940-43	Percentage Satis- factory	Grade- Point Rating
College Entrance Examination Board	20	55	2.26
Navy Department Examinations	1	100	3.19
Oxford and Cambridge School Examination Board ..	2	100	3.24

FROM PRIVATE SCHOOLS

	No. of Students 1940-43	Percentage Satis- factory	Grade- Point Rating
<i>Arizona</i>			
Jakobe School	1	0	1.14
Tucson: Evans School	1	100	2.34
Southern Arizona School for Boys	1	100	2.13

TABLE VIII (Continued)

	No. of Students 1940-43	Percentage Satis- factory	Grade- Point Rating
<i>California</i>			
Alhambra: Ramona Convent of the Holy Names . .	1	100	3.60
Arden: Flintridge School for Girls	6	83	2.28
Bakersfield: Mabelle Scott Rancho School	1	100	2.77
Belmont: College of Notre Dame High School	4	100	2.62
Berkeley: Anna Head School	16	75	2.37
A-to-Zed School	8	50	2.01
Burlingame: Mercy High School	3	100	2.59
Carlsbad: Santa Barbara School	3	67	2.06
Claremont: Webb School	16	75	2.57
Costa Mesa: Bishop's School	10	90	2.59
Costa Mesa: Black-Foxe Military Institute	3	67	2.17
Cummock School	3	100	2.41
Immaculate Heart High School	2	100	2.97
Loyola High School	1	0	1.77
Marlborough School	67	88	2.64
Marymount School	2	0	1.84
Westlake School for Girls	14	71	2.46
Costa Mesa: Montezuma Mountain School for Boys .	2	100	2.78
Costa Mesa: Midland School	2	100	2.71
Menlo Park: Convent of Sacred Heart High School	4	75	2.75
Menlo School	25	65	2.21
North Hollywood: Harvard School	13	83	2.65
Oakland: Holy Names Central High School	1	100	2.50
Orange: California Preparatory School	3	0	1.35
St. Thomas of Villanova Preparatory School . .	1	0	1.17
Thacher School	13	77	2.45
Orland: Castilleja School	28	73	2.32
Interdale School for Boys	8	13	1.95
Miss Harker's School	5	80	2.81
Pasadena: Flintridge Preparatory School for Boys .	8	63	2.25
University School	4	50	2.29
Westridge School for Girls	12	83	2.82
Petaluma: Douglas School	4	75	2.01
Polling Hills: Chadwick Seaside School	7	100	2.80
Ross: Katharine Branson School	16	94	2.74
Sacramento: Christian Brothers School	2	100	3.13
San Diego: St. Augustine School of San Diego . . .	1	0	1.94
San Francisco: Bates School	9	50	1.99
Convent of the Sacred Heart	2	0	1.28
Drew School	4	0	1.40
Lick-Wilmerding-Lux Schools	1	100	2.55
Miss Burke's School	28	86	2.56
St. Ignatius High School	9	78	2.46
St. Rose Academy High School	3	33	2.15
Sarah Dix Hamlin School	27	85	2.69
Wilkins Private High School	2	50	3.12
San Jose: Bellarmine College Preparatory School .	4	100	2.56
San Marino: The Meade School	2	50	2.06
San Rafael: Dominican Convent High School . . .	17	88	2.37
San Rafael Military Academy	11	30	1.77
Tamalpais School	5	100	2.79
Santa Barbara: Catalina Island School for Boys .	3	100	2.93
Hammond Hall of Santa Barbara	1	100	2.23
Marymount School	1	100	2.75
Thermon Oaks: Raenford School for Boys	3	0	1.53

TABLE VIII (Continued)

	No. of Students 1940-43	Percentage Satis- factory	Grade Point Rating
<i>Colorado</i>			
Colorado Springs: Fountain Valley School	1	0	1.97 7
Denver: Kent School for Girls	1	100	3.20 0
Randell School	1	0	1.6 2
<i>Connecticut</i>			
Avon School	1	100	2.62 2
Farmington: Miss Porter's School	1	100	2.52 2
Kent School	2	100	2.84 4
Lakeville: Hotchkiss School	3	100	2.38 8
Pomfret School	1	0	1.61 1
Salisbury School	2	50	1.88 8
Simsbury: Ethel Walker School	1	100	2.48 8
Wallingford: Choate School	2	100	2.73 3
Waterbury: St. Margaret's School	1	100	2.00 40
Watertown: Taft School	1	100	2.08 8
Windsor: Loomis School	2	50	1.9 5
<i>Delaware</i>			
Wilmington: Friends School	1	100	2.6 3
<i>District of Columbia</i>			
Washington: Chevy Chase School	1	0	1.9 6
Holton Arms School	1	100	2.5 5
Mount Vernon Seminary, Preparatory Depart- ment	2	100	2.7 1
<i>Territory of Hawaii</i>			
Honolulu: Punahou Academy	30	73	2.38 38
<i>Illinois</i>			
Alton: Western Military Academy	1	100	2.3 31
Chicago: Francis W. Parker School	1	Leave	...
University of Chicago High School	2	100	2.82 35
Elgin Academy	1	100	2.46 6
Evanston: Roycemore School	4	100	2.30 30
Lake Forest: Ferry Hall	1	100	2.21 21
Lake Forest Academy	4	0	1.51 1
River Forest: Trinity High School	1	100	2.18 8
Winnetka: North Shore Country Day School	1	100	2.91 1
<i>Indiana</i>			
Culver Military Academy	11	30	1.90 40
<i>Maryland</i>			
Baltimore: Notre Dame of Maryland High School	1	0	0.89 9
<i>Massachusetts</i>			
Andover: Abbot Academy	2	100	2.86 6
Phillips Academy	3	67	2.46 6
Concord: Middlesex School	1	0	0.46 6
Deerfield Academy	3	100	2.60 0
Franklin: Dean Academy	1	0	1.60 0
Groton School	1	0	0.53 3
Hingham: Derby Academy	1	100	2.20 0
Milton Academy	3	33	1.80 0
Natick: Walnut Hill School	1	100	2.39 9
Southborough: St. Mark's School	1	0	1.39 9
Springfield: MacDuffie School	1	100	3.67 7
Wellesley: Dana Hall School	2	50	2.78 8
<i>Michigan</i>			
Grosse Pointe: Detroit University School	2	100	3.38 38

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No. of Students 1940-43	Percentage Satis- factory	Grade- Point Rating
1	100	2.77
1	100	3.46
2	50	2.07
1	100	2.05
1	100	2.28
1	0	1.83
1	0	1.10
12	92	2.77
1	100	2.55
1	0	1.73
5	80	2.38
1	100	3.86
1	0	1.97
1	100	2.49
1	100	2.31
1	0	0.90
1	100	3.00
1	0	0.47
2	50	2.32
2	50	1.91
1	100	3.09
3	100	2.88
1	0	1.57
1	100	2.11
1	100	2.82
2	100	3.40
6	67	2.49
1	0	1.00
4	100	2.63
1	0	1.19
1	0	1.70
1	100	2.11
1	100	2.78
1	0	1.83
2	0	0.89
2	100	2.50
1	100	2.35
1	100	2.13
1	100	3.31
1	0	1.81
1	100	2.33

TABLE VIII (Continued)

	No. of Students 1940-43	Percentage Satis- factory	Grade- Point Rating
<i>Utah</i>			
Mount Pleasant: Wasatch Academy.....	2	50	1.98
Salt Lake City: Judge Memorial School.....	1	100	2.10
Rowland Hall	4	75	2.35
<i>Vermont</i>			
Saxtons River: Vermont Academy.....	1	0	1.57
<i>Virginia</i>			
Alexandria: Episcopal High School.....	1	100	2.78
Greenway: Madeira School	1	100	2.47
Middleburg: Foxcroft School	1	100	3.38
<i>Washington</i>			
Seattle: Helen Bush School.....	3	100	2.83
Lakeside School	13	46	2.14
St. Nicholas School	3	100	2.79
Spokane: Gonzaga High School.....	1	100	2.11
Tacoma: Annie Wright Seminary.....	4	100	2.98
Walla Walla: St. Paul's School.....	4	75	2.49
<i>Wisconsin</i>			
Delafield: St. John's Military Academy.....	1	0	1.55
Lake Geneva: Northwestern Military and Naval Academy	1	100	2.23
Milwaukee Country Day School.....	1	100	3.63
Milwaukee University School	3	67	2.69
Prairie du Chien: Campion High School.....	1	0	0.46

FROM PUBLIC SCHOOLS

	No. of Students 1940-43	Percentage Satis- factory	Grade- Point Rating
<i>Alaska</i>			
Anchorage High School	1	0	1.08
Juneau High School	1	100	2.76
<i>Arizona</i>			
Bisbee High School	1	100	3.20
Buckeye Union High School.....	1	0	1.64
Douglas High School	4	100	3.30
Flagstaff High School	1	0	1.76
Globe High School	1	0	1.73
Hayden High School	1	100	3.21
Miami High School	1	100	2.28
Phoenix: North Phoenix High School.....	7	29	1.82
Phoenix Union High School.....	6	83	2.55
Tempe Union High School	2	100	3.38
Tucson High School	3	67	2.82
Yuma High School	2	50	1.98
<i>Arkansas</i>			
Forrest City High School.....	1	100	2.00
Pine Bluff High School.....	1	0	1.81
Stuttgart High School	1	100	2.38
<i>California</i>			
Alameda High School	10	80	2.45
Albany High School	1	100	2.50
Alhambra City High School.....	5	60	2.04

TABLE VIII (Continued)

	No. of Students 1940-43	Percentage Satis- factory	Grade- Point Rating
Union High School.....	1	100	2.17
mp: Bret Harte Union High School....	1	0	1.87
High School	1	100	2.75
Placer Union High School.....	3	100	3.08
trus Union High School.....	4	75	2.37
l: Kern County Union High School....	13	92	2.57
Union High School.....	1	100	2.37
High School	8	75	2.30
ills High School.....	69	84	2.67
e High School	43	84	2.47
Union High School.....	2	100	2.68
Union High School.....	2	100	3.13
h School	10	100	2.75
High School	1	100	2.25
ion High School.....	2	100	2.42
Union High School.....	1	100	2.40
ion High School.....	1	0	1.50
ion High School.....	1	100	2.00
Union High School.....	3	67	1.83
nion High School.....	1	100	2.00
High School	3	100	2.44
Joint Union High School.....	1	100	3.02
nion High School.....	5	80	2.32
San Ramon Valley Union High School..	3	100	2.67
int Union High School.....	2	100	2.85
Union High School.....	1	100	2.64
Joint Union High School.....	1	100	2.57
: Central Union High School.....	2	100	2.72
Union High School.....	2	100	3.24
San Dieguito Union High School.....	1	0	0.81
nion High School.....	2	0	1.79
igh School	1	100	2.90
nion High School.....	1	100	2.34
Armijo Union High School.....	1	100	3.02
: San Juan Union High School.....	1	100	3.06
Union High School.....	1	0	1.87
entral Union High School.....	1	100	2.60
High School	26	73	2.54
e Roosevelt High School.....	5	80	2.65
Union High School.....	6	67	2.23
ion High School.....	4	50	2.00
High School	14	86	2.87
Hoover High School.....	15	87	2.34
ley High School	1	0	1.39
Union High School.....	2	100	3.46
oint Union High School.....	7	43	2.07
Union High School.....	2	100	2.48
High School	2	100	3.24
nion High School.....	4	100	2.55
San Benito County High School.....	2	100	2.24
Union High School.....	1	0	1.68
1 Beach Union High School.....	3	0	1.37
1 Park High School.....	6	50	2.14
Union High School.....	2	100	2.93
nion High School.....	1	100	2.74

TABLE VIII (Continued)

	No. of Students 1940-43	Percentage Satis- factory
King City Union High School.....	1	100
Lafayette: Acalanes Union High School.....	1	0
Laguna Beach High School.....	3	33
La Jolla High School.....	5	40
La Verne: Bonita Union High School.....	1	100
Lemoore Union High School.....	2	50
Linden Union High School.....	1	100
Lindsay High School	2	100
Livermore Union High School.....	1	100
Livingston High School	1	100
Lompoc Union High School.....	1	100
Long Beach: David Starr Jordan High School....	1	100
Long Beach Polytechnic High School.....	14	71
Woodrow Wilson High School.....	15	73
Los Angeles: Alexander Hamilton High School..	4	75
Belmont High School	1	100
Eagle Rock High School.....	1	100
Fairfax High School	10	100
George Washington High School.....	1	100
Hollywood High School	13	85
John C. Fremont High School.....	1	0
John Marshall High School.....	9	67
Los Angeles High School.....	72	82
Manual Arts High School.....	1	0
Susan M. Dorsey High School.....	2	100
University High School	26	84
Woodrow Wilson High School.....	1	100
Los Banos: West Side Union High School.....	2	100
Los Gatos Union High School.....	8	88
Madera Union High School.....	4	75
Mariposa County Union High School.....	2	100
Martinez: Alhambra Union High School.....	2	100
Merced Union High School.....	8	63
Mill Valley: Tamalpais Union High School.....	13	85
Modesto High School	4	100
Monrovia-Arcadia-Duarte Union High School....	3	100
Monterey Union High School.....	1	100
Mountain View Union High School.....	9	78
Napa Union High School.....	6	83
Newport Beach: Newport Harbor Union High School	2	100
North Hollywood High School.....	5	100
North Sacramento: Grant Union High School....	1	100
Norwalk: Excelsior Union High School.....	1	100
Oakdale Union High School.....	2	0
Oakland: Castlemont High School.....	1	100
Fremont High School	1	100
Oakland High School	30	73
Oakland Technical High School.....	3	67
University High School	16	75
Oceanside-Carlsbad Union High School.....	1	100
Ojai: Nordhoff Union High School.....	2	100
Ontario: Chaffey Union High School.....	1	100
Orland Joint Union High School.....	1	100
Oxnard Union High School.....	5	100

TABLE VIII (Continued)

	No. of Students 1940-43	Percentage Satis- factory	Grade- Point Rating
Pacific Grove High School.....	2	100	3.27
Palm Springs High School.....	4	100	3.35
Palo Alto High School.....	131	76	2.47
Pasadena High School.....	18	89	2.62
Paso Robles Union High School.....	3	33	2.23
Patterson Union High School.....	4	75	2.17
Pescadero Union High School.....	1	100	2.94
Petaluma High School.....	7	66	2.31
Piedmont High School.....	48	63	2.29
Pittsburg High School.....	1	100	2.38
Placentia: Valencia High School.....	3	100	2.70
Placerville: El Dorado County High School.....	1	100	3.80
Pomona High School.....	1	100	2.33
Porterville Union High School.....	5	80	2.71
Red Bluff Union High School.....	1	100	2.53
Redding: Shasta Union High School.....	3	67	2.87
Redlands High School.....	9	44	2.08
Redondo Union High School.....	8	100	2.56
Redwood City: Sequoia Union High School.....	30	70	2.32
Reedley Joint Union High School.....	1	100	2.31
Richmond Union High School.....	8	75	2.55
Rio Vista Joint Union High School.....	3	67	2.48
Riverside Polytechnic High School.....	11	91	2.79
Sacramento: McClatchy High School.....	19	89	2.34
Sacramento High School.....	25	76	2.40
Salinas Union High School.....	12	75	2.41
San Andreas: Calaveras Union High School.....	1	0	1.61
San Bernardino High School.....	9	100	2.56
San Diego: Herbert Hoover High School.....	4	50	1.97
Point Loma High School.....	15	100	2.60
San Diego High School.....	12	92	2.87
San Fernando High School.....	4	50	2.45
San Francisco: Abraham Lincoln High School...	3	67	2.01
Balboa High School.....	2	100	3.60
Galileo High School.....	10	70	2.42
George Washington High School.....	19	83	2.61
High School of Commerce.....	3	33	2.01
Lowell High School.....	101	76	2.48
Mission High School.....	2	50	2.11
Polytechnic High School.....	4	75	2.04
San Jose: Abraham Lincoln High School.....	1	0	1.08
San Jose High School.....	23	91	2.53
San Leandro High School.....	8	100	2.74
San Luis Obispo High School.....	8	63	2.46
San Mateo High School.....	18	89	2.74
San Pedro High School.....	1	100	3.87
Santa Ana High School.....	7	57	2.85
Santa Barbara High School.....	11	64	2.52
Santa Clara Union High School.....	3	100	2.53
Santa Cruz High School.....	9	89	2.56
Santa Maria Union High School.....	5	100	2.71
Santa Monica High School.....	7	57	2.35
Santa Paula Union High School.....	6	83	2.68
Santa Rosa High School.....	2	100	2.72
Selma Union High School.....	3	67	2.54

TABLE VIII (Continued)

	No. of Students 1940-43	Percentage Satis- factory	Gra- de- Point Rati- ing
Shafter High School	4	75	2.7 71
Shandon High School	1	0	1.9 93
Sonoma Valley Union High School.....	2	100	2.4 44
Sonora Union High School.....	3	50	1.9 93
South Pasadena-San Marino High School.....	56	80	2.6 68
Stockton High School	15	93	2.4 47
Susanville: Lassen Union High School.....	3	33	1.9 99
Sutter Creek Union High School.....	1	100	2.5 58
Taft Union High School.....	2	100	2.7 74
Tomales Joint Union High School.....	1	100	3.7 71
Tracy Union High School.....	1	100	2.1 74
Tranquility Union High School.....	1	100	2.6 63
Tulare Union High School.....	4	75	2.5 58
Tulelake: Tule Lake High School.....	3	100	2.5 58
Turlock Union High School.....	4	100	2.3 39
Ukiah Union High School.....	2	100	2.8 86
Vallejo High School	10	40	1.7 77
Van Nuys High School.....	2	100	2.5 56
Ventura Union High School.....	4	75	2.6 64
Visalia Union High School.....	4	50	2.1 15
Watsonville Union High School.....	6	83	2.4 41
Westwood High School	1	0	0.6 61
Whittier Union High School.....	14	86	2.5 51
Willows: Glenn County High School.....	1	100	2.2 2
Wilmington: Phineas Banning High School.....	1	100	2.9 9
Woodland High School	3	67	2.2 2
Yuba City Union High School.....	5	40	2.4 4
<i>Colorado</i>			
Brighton High School	1	100	2.9 9
Canon City High School.....	1	100	3.2 2
Colorado Springs High School.....	2	100	3.6 6
Denver: East High School.....	6	100	2.6 6
South High School	1	100	2.1 1
<i>Connecticut</i>			
Greenwich High School	1	100	2.3 35
Hartford: Weaver High School.....	1	100	2.4 47
<i>Delaware</i>			
Wilmington High School	1	100	3.5 56
<i>District of Columbia</i>			
Washington: Western High School.....	1	100	2.0 06
Woodrow Wilson High School.....	3	67	2.3 31
<i>Florida</i>			
Lakeland High School	1	100	2.6 65
<i>Territory of Hawaii</i>			
Honolulu: Roosevelt High School.....	5	100	2.6 69
<i>Idaho</i>			
Boise High School	11	82	2.8 82
Coeur d'Alene High School.....	1	100	2.8 84
Filer High School	1	0	1.9 93
Idaho Falls High School.....	3	67	2.2 26
Kellogg High School	1	100	3.3 33
Lewiston High School	1	0	1.7 78
Mountain Home High School.....	1	100	2.5 59

TABLE VIII (Continued)

	No. of Students 1940-43	Percentage Satis- factory	Grade- Point Rating
High School	1	100	2.17
o High School	1	100	2.14
alls High School.....	1	100	2.27
High School	1	100	2.17
gton High School	1	100	3.49
: Hyde Park High School.....	1	100	2.72
an Park High School.....	1	100	3.11
High School	2	50	2.40
n Township High School.....	3	67	2.54
e Township High School.....	1	100	3.27
e High School	1	100	2.23
th High School	1	100	2.75
rk and River Forest Township High School	4	100	2.57
High School	1	100	2.00
ille High School	1	100	2.67
d High School	1	100	2.55
Community High School.....	1	100	3.27
ca.: New Trier Township High School....	13	77	2.79
y High School.....	1	Leave	....
e High School	1	100	2.78
le High School	1	0	1.22
Springs High School.....	1	100	3.05
lend High School.....	1	100	2.68
igh School	1	0	0.00
City: Wyandotte High School.....	1	100	3.02
Community High School.....	1	100	2.76
mie High School	1	0	1.64
High School	1	0	1.91
High School	1	100	2.75
etts			
Public Latin School.....	1	100	3.33
High School	1	100	3.34
ham: Baldwin High School.....	1	100	2.94
City High School.....	1	100	2.65
ronton High School	1	100	3.27
polis: John Marshall High School.....	1	100	2.75
High School	4	67	2.63
deo High School	1	100	2.28
City: Southwest High School.....	9	89	2.92
Smith-Cotton High School	2	50	2.29
ee High School	1	100	2.05
High School	3	100	3.09
n: Gallatin County High School.....	1	100	2.22
igh School	3	67	2.68
dge: Powell County High School.....	1	100	2.75

TABLE VIII (Continued)

	No. of Students 1940-43	Percentage Satis- factory	Grade- Point Rating
Great Falls High School	4	100	2.95
Kalispell: Flathead County High School.....	1	100	2.29
Livingston: Park County High School.....	1	100	2.21
Malta High School	1	100	2.33
Missoula County High School.....	1	100	3.43
Outlook High School	2	50	2.15
<i>Nebraska</i>			
Aurora High School	1	100	2.34
Columbus High School	1	100	2.21
Grand Island High School.....	3	100	2.85
Omaha: Benson High School.....	1	100	2.41
Central High School	2	50	2.03
<i>Nevada</i>			
Carson City High School.....	1	0	1.50
Elko County High School.....	2	100	3.66
Ely: White Pine County High School.....	3	67	2.06
Hawthorne: Mineral County High School.....	1	0	1.80
Las Vegas High School.....	2	100	3.25
Lovelock: Pershing County High School	1	100	3.20
Reno High School	3	100	2.97
<i>New Jersey</i>			
Chatham High School	1	100	3.93
Elizabeth: Thomas Jefferson High School.....	1	100	3.59
Haddon Heights High School.....	1	100	2.45
Plainfield High School	1	100	3.00
<i>New Mexico</i>			
Albuquerque High School	1	100	3.50
Raton High School	1	100	2.51
Roswell: New Mexico Military Institute.....	7	33	1.72
Santa Fe High School.....	4	100	2.96
<i>New York</i>			
Baldwin High School	1	100	3.12
Bronxville High School	1	100	2.15
Freeport High School	2	100	2.79
Garden City High School.....	1	100	3.66
Mamaroneck High School	1	0	1.85
New York: George Washington High School.....	1	100	3.47
Stuyvesant High School	2	50	2.83
Tutoring School of New York.....	1	100	2.96
Rome Free Academy	1	0	1.32
Scarsdale High School	1	100	2.57
Yorktown Heights: Yorktown Central School.....	1	100	3.23
<i>North Dakota</i>			
Fargo High School	1	100	3.81
<i>Ohio</i>			
Bay Village: Parkview High School.....	1	100	2.88
Bexley High School	2	50	2.15
Chillicothe High School	1	100	2.86
Cleveland: Shaker Heights High School.....	2	50	1.51
Cuyahoga Falls High School.....	1	100	3.26
Dayton: Oakwood High School.....	1	0	0.77
Findlay High School	1	100	2.47
Lakewood High School	1	100	3.57
Mansfield High School	1	100	3.76

d)

No. of Students 1940-43	Percentage Satis- factory	Grade- Point Rating
1	100	2.54
1	100	2.79
1	100	3.33
1	100	2.05
3	67	2.05
1	100	3.16
3	67	1.94
1	100	2.16
1	100	2.26
1	0	1.91
1	100	2.03
3	100	2.35
2	50	2.13
3	100	2.91
1	100	3.36
2	0	1.66
1	0	1.75
1	100	3.19
1	0	1.61
21	71	2.39
4	50	1.91
27	89	2.52
8	88	2.62
1	100	3.74
1	100	3.00
1	0	1.94
1	0	1.83
1	0	0.11
1	100	3.73
1	100	2.11
1	0	1.05
1	100	2.85
1	100	2.50
5	100	2.71
3	100	3.28
1	100	2.79
1	0	1.87
2	50	2.00
1	100	2.50
4	100	2.59
1	0	1.50
1	100	2.53
7	83	2.48
2	100	3.33
1	0	1.69

TABLE VIII (Continued)

	No. of Students 1940-43	Percentage Satis- factory	Grade- Point Rating
<i>Virginia</i>			
Norfolk: Matthew F. Maury High School.....	1	100	2.72
<i>Washington</i>			
Aberdeen: Weatherwax High School.....	1	0	0.92
Adna High School	1	0	1.75
Battle Ground High School.....	1	100	3.09
Bellingham High School	4	50	2.14
Bothell High School	1	0	1.87
Bremerton High School	1	100	2.72
Camas High School	2	50	1.93
Carnation: Tolt High School.....	1	100	3.76
Dayton High School	1	100	2.81
Enumclaw High School	1	0	1.11
Everett High School	3	67	2.06
Greenacres: Central Valley High School.....	1	0	1.63
Hoquiam High School	3	67	2.33
Longview: A. A. Long High School.....	2	100	2.55
Mason City High School.....	1	100	2.89
Olympia High School	4	75	2.34
Pasco High School	1	100	3.53
Poulsbo: North Kitsap High School.....	1	0	1.93
Puyallup High School	1	100	2.86
Raymond High School	2	50	2.07
Seattle: Broadway High School.....	3	67	2.23
Franklin High School	3	33	2.25
Garfield High School	2	0	1.58
Queen Anne High School... ..	1	100	2.51
Roosevelt High School	6	67	2.59
West Seattle High School.....	1	100	2.40
Sedro Woolley Union High School.....	2	50	2.08
Spokane: Lewis and Clark High School.....	14	71	2.34
Tacoma: Clover Park High School.....	3	33	1.86
Stadium High School	17	65	2.51
Vancouver High School	1	100	3.22
Yakima High School	1	100	3.64
<i>West Virginia</i>			
Charleston High School	1	0	1.98
<i>Wisconsin</i>			
Madison: Wisconsin High School.....	1	100	2.36
Milwaukee: North Division High School.....	1	100	2.50
<i>Wyoming</i>			
Cheyenne High School	2	100	2.45
Cody High School	1	100	2.57
Riverton High School	1	100	2.00

FROM PREPARATORY SCHOOLS IN FOREIGN COUNTRIES

	No. of Students 1940-43	Percentage Satis- factory	Grade- Point Rating
<i>Brazil</i>			
Rio de Janeiro: American School of Rio de Janeiro	1	100	2.38
São Paulo Graded School.....	1	0	1.50

TABLE IX (Continued)

	Ph.D.	M.D.	LL.M.	LL.B.	Ed.D.	Engr.	M.B.A.	I.A.	A.M.	A.B.
Pre-Legal Curriculum	..	..	..	..	..	..	..	..	..	9
School of Letters.....	..	..	..	..	..	..	..	..	..	25
English	..	..	..	..	..	..	..	..	..	4
Romanic Languages.. .. .	..	..	..	..	..	..	..	..	..	1
Speech and Drama....	..	..	..	..	..	..	..	..	..	2
School of Medicine....	..	62	..	..	..	..	..	..	..	..
Nursing Curriculum.. .. .	..	..	..	..	..	..	..	..	..	24
School of Physical Sci-										
ences	..	..	..	..	..	..	..	..	..	48
Chemistry	4	..	..	..	..	..	..	..	..	12
Geology	1	..	..	..	..	..	..	..	..	4
Mathematics	1	..	..	..	..	..	..	..	..	1
Physics	2	..	..	..	..	..	..	..	..	..
School of Social Sciences ..	..	..	..	..	..	..	..	..	..	291
History	2	..	..	..	..	..	..	..	..	6
Political Science	2	..	..	..	..	..	..	..	..	6
Psychology	2	..	..	..	..	..	..	..	..	3
Sociology	..	..	..	..	..	..	..	..	..	2
Total	29	62	2	12	17	13	21	8	131	717

SUMMARY OF DEGREES GRANTED 1942-43

	October	January	April	June	Total	Men	W
Bachelor of Arts	73	87	192	365	717	432	~~285~~ 85
Master of Arts	41	30	15	45	131	81	~~50~~ 50
Industrial Administrator	3	3	1	1	8	8	..
Master of Business Administration	3	6	10	2	21	20	..
Engineer	..	1	3	9	13	13	..
Doctor of Education	6	3	1	7	17	15	..
Bachelor of Laws	1	..	5	6	12	12	..
Master of Laws	1	..	..	1	2	1	..
Doctor of Medicine	..	1	..	61	62	57	..
Doctor of Philosophy	9	7	4	9	29	25	..
Total	137	138	231	506	1,012	664	~~358~~ 358

JOHN PEARCE MITCHELL, Registrar

APPENDIX V

PUBLICATIONS OF THE FACULTY

September 1, 1942, to August 31, 1943

Compiled in the Reference Division of the Stanford University Library)

ADMINISTRATION

CHANCELLOR'S OFFICE

LYMAN WILBUR, Chancellor:

Additional comments on Dr. Wright's articles on inflation and deflation. (With others): *Commercial and financial chronicle*, 158:691, August 19, 1943.

The American plan for postwar Germany: *American mercury*, 56:762, June, 1943.

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The chancellor's column: *Stanford alumni review*, v. 44, 1942-43.

Athletics: 1918 and 1943: p. 1-2, June, 1943.

The draft and Stanford: p. 1, November, 1942.

Faculty books: p. 1, October, 1942.

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How to win the peace: p. 1-2, December, 1942.

New president appraised: p. 1-2, February, 1943.

Process of adjustment: p. 1-2, May, 1943.

Sectarian independence: p. 1-2, July, 1943.

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Temporary respite: p. 3-4, January, 1943.

Foreword: Byrd, O. E., compiler. *Health instruction yearbook*, 1943.

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- Mind not used is a mind abused: a message to graduates: *School and society*, 58: 81-82, August 7, 1943.
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- University in wartime: *Stanford university bulletin*, ser. 7, no. 52, January 26, 1943. p. 3-4.
- The university president: essential characteristics for success: *University administration quarterly*, 2: 5-9, Summer, 1943.
- A volunteer health organization. An address given at the thirtieth annual meeting of the American social hygiene association, Buffalo, New York, February 1, 1943: *Journal of social hygiene*, 29: 128-133, March, 1943.
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- Review of: Smith, G. Plague on us. 1941: *Ibid.*, 53: 279, September, 1941.*
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- Review of: Yearbook of public health, 1941; ed. by J. C. Geiger. 1941: *Ibid.*, p. 569, December, 1942.

DEAN OF MEN'S OFFICE

JOHN WILLIAM BUNN:

- [Coaching philosophy]: *Dean, E. S. Progressive basketball*. Stanford University, Calif., The author, [c1942] p. 10-12.

STANLEY LOUIS SHARP:

- Effective study methods: *Journal of higher education*, 14: 271-272, May, 1943.

REGISTRAR'S OFFICE

KARL MONTAGUE COWDERY:

- Implications and results of in-service training: *American college personnel association. Report of the nineteenth annual meeting, San Francisco, Calif., February, 1942*. p. 38-42.

* Not included in Publications of the Faculty for 1941-42.

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Sidelights on the investment policies of Stanford, Huntington, Hopkins, and Crocker: *Business historical society. Bulletin*, 16:85-89, November, 1942.

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Editor: *Ibid.* v. 2, no. 5-10, January 29—March 5, 1943.

ROBERT GORDON VOSPER:

Compiler: Publications of the faculty, September 1, 1941 to August 31, 1942. (With W. O. Youngs): *Annual report of the president of Stanford university for the fifty-first academic year ending August 31, 1942*. (*Stanford university bulletin*, ser. 7, no. 51. December 31, 1942) p. 525-576.

WILLARD OLIVER YOUNGS:

Compiler: Publications of the faculty, September 1, 1941 to August 31, 1942. (With R. G. Vosper): *Annual report of the president of Stanford university for the fifty-first academic year ending August 31, 1942*. (*Stanford university bulletin*, ser. 7, no. 51. December 31, 1942) p. 525-576.

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ON WAR, REVOLUTION, AND PEACE

RALPH HASWELL LUTZ:

The Hoover library on war, revolution, and peace. Annual report of the chairman of directors, 1941-42. Stanford University, Stanford university press (1942) 33 p. (Reprinted with additions from the annual report of the president of Stanford university for the fifty-first academic year ending August 31, 1942).

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SCHOOL OF BIOLOGICAL SCIENCES

BIOLOGY

CHARLES VINCENT TAYLOR:

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The relation of genetics to growth factors and hormones. (With E. L. Tatum): *Growth*, v. 6, supplement (Fourth symposium on development and growth) p. 27-35, 1942.

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